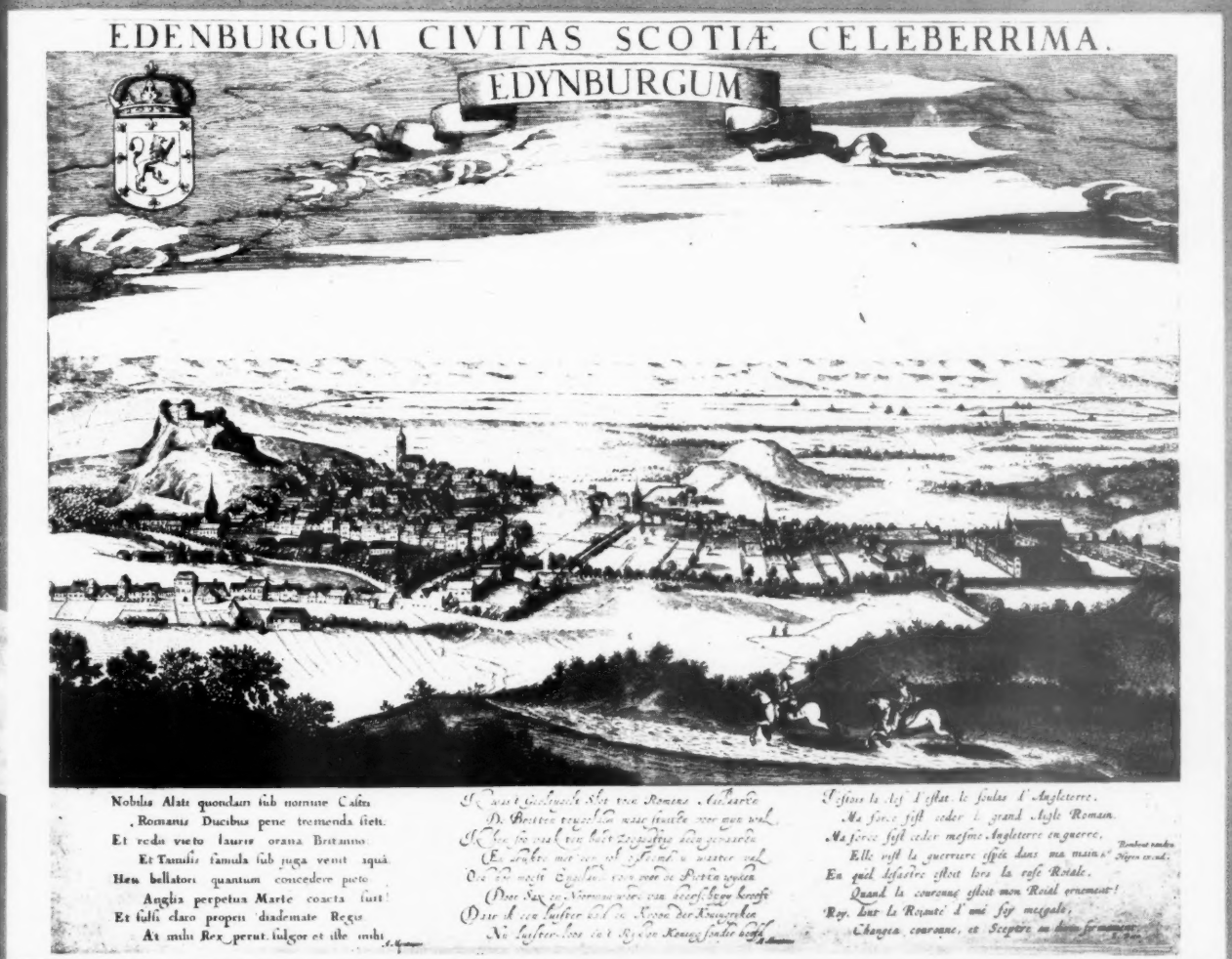
THIRD SERIES VOL 59 NUMBER 8 JUNE 1952

UNIVERSITY OF MINNESOTA LIBRARY RECEIVED JUL 7 '52

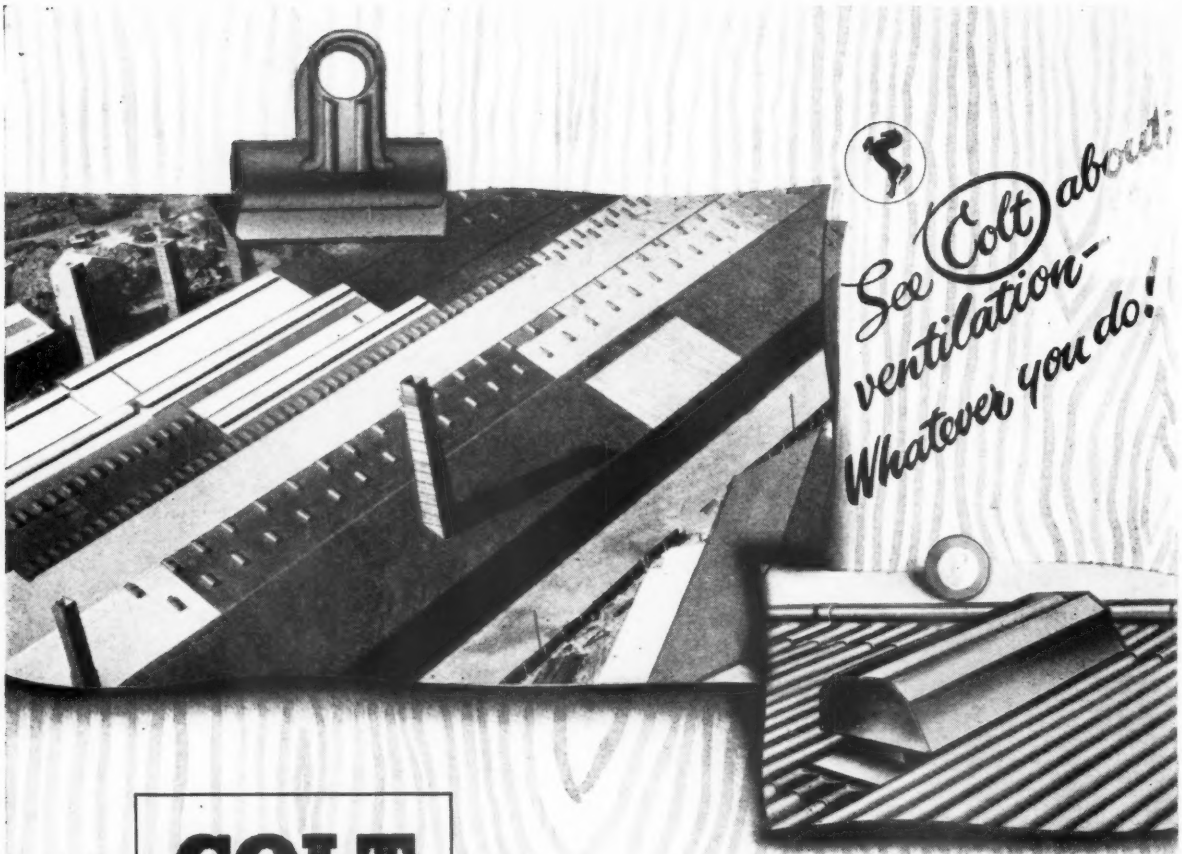
THE JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

66 PORTLAND PLACE LONDON W1 · TWO SHILLINGS AND SIXPENCE

JUL 10 1952


EDENBURGUM CIVITAS SCOTIÆ CELEBERRIMA.
EDYNBURGUM
Nobilis Alatæ quondam sub nomine Castra
Romanis Ducibus pene tremenda fuit.
Et regia vueto lauris orata Britanno
Et Tamulis famula sub juga venit aquâ.
Heu bellatori quantum concedere pleto
Anglia perpetua Marte coacta fuit!
Et fulsit claro propera diademate Regis
At mihi Rex perut fulgor et ille mihi.
Dieser Sax: ist Normans werck: und hoeff sehr hoch
Ne Luisser-Lon ist Regen Konigs stader noch
J'estois la Jes l'effat le fardas d'Angleterre.
Ma force fist ceder le grand Aigle Romain.
Ma force fist ceder mesme Angleterre en guerre.
Elle vist la guerriere issuë dans ma main
En quel desastre estoit lors la rose Royale.
Quand la couronne estoit mon Roial ornement!
Roy. Leur Le Roiauté d'ou fist mesgale,
Changea couronne, et Sceptre en dure formement

From an old print of Edinburgh. The view is from Salisbury Crags.



PUT **COLT** IN

THE PICTURE....

at the drawing-board stage

The installation at the factory of Messrs. Hale and Hale Ltd., Tipton, shown above, is just one of many specialised installations that Colt have planned and carried out. It uses the S.R. Ventilator which is designed on aerodynamic principles embodying aerofoil curves to assist the process of convection by harnessing the free power of the wind and roof eddies, no matter from which direction they come, creating a suction which can produce a power of extraction equal to that of mechanical means without the drawback of noise, wearing parts or operating and maintenance costs.

When you are working on any new plans, always remember that the Colt organisation is at your command. Very many years' experience of all types of ventilation problems enables us to bring a completely practical approach to the science of air induction and extraction, and this specialised knowledge will ensure maximum efficiency and the widest flexibility for any proposed ventilation scheme. Our experts are always enthusiastic to tackle new problems or advise on more familiar ones.

A FREE MANUAL

with full specifications of the types of standard Colt Ventilators is available on request from Dept. A.7/148.

COLT VENTILATION

INDUSTRIAL AND DOMESTIC

COLT VENTILATION LTD · SURBITON · SURREY · ELMbridge 6511-5

Also at Birmingham, Bradford, Bristol, Cardiff, Coventry, Glasgow, Kilmarnock, Liverpool, Manchester, Newcastle-on-Tyne and Sheffield

A.7

THE JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

THIRD SERIES VOL 59 NUMBER 8 : : JUNE 1952 : : TWO SHILLINGS & SIXPENCE

66 PORTLAND PLACE LONDON W1 : TELEPHONE: LANGHAM 5721-7 : TELEGRAMS: RIBAZO WESDO LONDON

273 EDITORIAL
275 THE LESSON OF EDINBURGH—ROBERT GARDNER-MEDWIN
281 VISIT OF THE PRESIDENT AND SECRETARY TO CANADA AND THE U.S.A.
286 INIGO JONES: A REVALUATION—MARGARET WHINNEY
290 SOME IMPRESSIONS OF INDUSTRIAL ENTERPRISE IN SWEDEN—C. S. WHITE
295 A MULTI-TYPE SCHOOL IN BIRMINGHAM
298 REVIEW OF CONSTRUCTION AND MATERIALS
300 PRACTICE NOTES
302 A.B.S. ANNUAL GENERAL MEETING
302 BOOK REVIEWS
304 CORRESPONDENCE
305 NOTES FROM THE MINUTES OF THE COUNCIL
305 OBITUARIES
307 NOTES AND NOTICES
308 MEMBERS' COLUMN

Her Majesty the Queen, our Patron

The President has been informed by the Keeper of the Privy Purse that The Queen has been graciously pleased to grant her Patronage to the Royal Institute of British Architects.

Birthday Honours

Among the Birthday Honours this year are the following:

Knight Bachelor: R. E. Mortimer Wheeler, C.I.E., M.C., Secretary, British Academy.

K.C.B. (Civil): John M. K. Hawton, C.B., Secretary, Ministry of Health.

C.B.E. (Civil): E. M. O'Rorke Dickey, Inspector of Schools, Ministry of Education. Dr. T. J. Drakeley, Principal, Northern Polytechnic and member of the R.I.B.A. Board of Architectural Education. John N. Summerson [*A*], Curator of Sir John Soane's Museum.

O.B.E. (Civil): H. Blackman, Director, The National Federation of Plumbers and Domestic Engineers. H. Carr [*F*], County Architect and Planning Officer, Montgomery. C. W. Childs [*A*], Senior Architect, Ministry of Education. T. E. North [*F*], Architect and Planning Officer, West Ham. W. Stockdale [*F*], H. G. Warren [*A*], L. H. Wilson [*A*], City Architect, Canterbury. F. R. Yerbury [*Hon. A.*], Director, Building Centre.

M.B.E. (Civil): L. H. Clarke [*A*], Borough Engineer and Architect, Harrogate. C. F. Ward [*F*], Welsh Office, Ministry of Housing.

Architectural Association Council, 1952-1953

Officers and Council of The Architectural Association for the Session 1 June 1952 to 31 May 1953 are as follows: *President*, A. R. F. Anderson [*F*]. *Vice-Presidents*, Sir Hugh Casson, R.D.I., M.A. [*F*] and Peter Shepheard, B.Arch., A.M.T.P.I., [*A*]. *Hon. Secretary*, Gontran Goulden, T.D. [*A*]. *Hon. Treasurer*, Bryan Westwood, A.A.Dipl.(Hons.), [*F*]. *Hon. Editor*, W. W. Atkinson, O.B.E., A.A.Dipl.(Hons.) [*A*]. *Hon. Librarian*, Hon. Godfrey Samuel, M.A., A.M.T.P.I. [*F*]. *Ordinary Members of Council*, G. Anthony Atkinson, B.Arch.(Hons.) [*A*]. J. M. Austin-Smith, M.C., A.A.Dipl. [*A*]. John Brandon-Jones, A.A.Dipl. [*A*]. Anthony M. Chitty, M.A., A.M.T.P.I., A.A.Dipl. [*F*] (Past President). D. Clarke Hall, A.A.Dipl. [*F*]. Neville Conder, A.A.Dipl.(Hons.) [*A*]. Hon. R. A. de Yarburgh-Bateson, M.A., A.A.Dipl. [*A*]. B. A. le Mare, A.A.Dipl. [*A*]. Miss Barbara Price, M.A., A.A.Dipl. [*A*]. Raglan Squire, M.S.I.A. [*F*]. Prof. Basil Ward, Hon.A.R.C.A. [*F*].

Housing Medals, 1952

The 1952 awards of housing medals and diplomas offered by the Minister of Housing and Local Government for the best designed local authority housing estate in England and Wales to be completed in 1951 have been announced. The winning schemes were chosen out of 275.

The awards are: *Northern area:* Messrs. William Dixon and Son, [*LL/A*]. *East and West Riding:* Messrs. Needham, Thorp and White [*FF/A*], *North Midland:* G. F. Lawson [*L*]. *Eastern:* Frederick Gibberd, M.T.P.I. [*F*], and P. V. E. Mauger, M.T.P.I. [*F*] and Partners. *London:* C. H. James, R.A. [*F*], and Louis de Soissons, O.B.E., A.R.A., M.T.P.I. and Partners [*F/A*]. *Southern:* Leon Berger [*A*] and R. C. White [*F*]. *South Western:* H. B. Rowe [*F*] and B. J. Ashwell, M.C. [*A*]. *Midland:* Frederick Gibberd, M.T.P.I. [*F*] and T. Bateman, A.M.T.P.I. [*A*]. *North Western:* E. A. Heppenstall, A.M.T.P.I. [*A*] and George Robb [*A*]. *South Eastern:* A. G. Sheppard Fidler, A.M.P.T.I. [*F*]. *Wales:* Alun Rogers, M.B.E., A.M.I.C.E., and J. B. Cooper [*F*].

The Minister of Housing and Local Government, the Rt. Hon. Harold Macmillan, will present the medals and diplomas at the R.I.B.A. on 16 July at 2.30 p.m.

Four Presidents. With the President R.I.B.A. are (top left) Mr. Peter Thornton [*A*], President of the Architectural Institute of British Columbia; (bottom left) Mr. Glenn Stanton, President of the American Institute of Architects, and (bottom right) Mr. J. Roxburgh Smith [*F*], President of the Royal Architectural Institute of Canada

Presentation of the Royal Gold Medal

Owing to Mr. Grey Wornum's health not having sufficiently recovered, the General Meeting arranged for 16 June, at which the Royal Gold Medal was to be presented, had to be cancelled. It is hoped to make the presentation at a General Meeting in October or November.

Superannuation Schemes for Assistants in Private Practice

Members will recall that a memorandum was published in the JOURNAL for January 1952, setting out various considerations in regard to superannuation schemes for assistants in private practice. Those interested were then asked to send in replies to certain questions; these replies have now been studied by the Allied Societies' Conference. From an estimated 5,000 members concerned, 777 replies were received, 720 expressing interest and a desire to participate and 57 expressing opposition to any form of scheme. Of the total replying favourably, 193 were principals, i.e., employers, and the remainder assistants or employees.

The Conference have confirmed that it would not be possible to provide a scheme in which pension provision would be interchangeable between official service and private practice. The Conference are of the opinion that there is insufficient evidence of interest to warrant starting a scheme at present and, taking also into consideration the present economic situation, they have decided to defer any further study of the matter until the beginning of 1953.

The Conference

At the time of going to Press it appears certain that the Edinburgh Conference will have a record attendance, exceeding the 660 membership of the Liverpool Conference of 1948. This may in part be due to the attraction the city has for architects, but it also appears likely that the subject of the two papers—housing—is drawing members, particularly from the offices of local authorities. All the tours are being well patronised and applications to attend the Conference dinner, namely, 450, are already a record. All that now seems to be required is good weather.

Mr. Howard Robertson, President 1952-3

Mr. Howard Morley Robertson, M.C., A.R.A., S.A.D.G. [*F*] has been elected unopposed as President in the forthcoming session. Born in 1888, Mr. Robertson studied at the Architectural Association and at the Ecole des Beaux Arts where he obtained his diploma in 1913. He served with distinction in France from 1915 to 1919 and was decorated with the Military Cross, Legion of Honour, U.S.A. Certificate of Merit and Officier de l'Etoile Noire. After the war he served under Robert Atkinson [*F*] on the staff of the A.A. School of Architecture, being Principal from 1920 to 1929 and succeeding Robert Atkinson as Director of Education from 1929 to 1935. He was awarded the R.I.B.A. Godwin and Wimperis Bursary in 1937, for which he studied continental schools.

As partner of J. Murray Easton [*F*] he was awarded the R.I.B.A. London Architecture Bronze Medal in 1928 in respect of the Hall of the Royal Horticultural Society, and, as partner in the firm of E. Stanley Hall and Easton and Robertson, the London Architecture Bronze Medal in 1936 in respect of the Nurses' House of the Hospital for Sick Children. In 1949 he received the Royal Gold Medal for Architecture and was elected A.R.A.

In addition to the wide range of buildings carried out in co-operation with his partners, Mr. Robertson designed the British Government Pavilions at the Paris Exhibition of 1926, the Brussels Exhibition of 1935, the Johannesburg Exhibition of 1936 and the New York World Fair of 1939. In 1946 he was British representative on the international committee of architects which advised on the United Nations headquarters in New York.

Mr. Robertson is also the author of several books, including *Principles of Architectural Composition*, *Architecture Explained*, *Modern Trend Details* (with F. R. Yerbury [*Hon. A*]), *Modern Architectural Design* and *Architecture Arising*.

In 1927 he married Miss Doris A. Lewis [*A*] and is thus the first President of the R.I.B.A. whose wife is also an architect. In 1947 he was Centenary President of the Architectural Association.

The Annual Reception, 1952

Approximately 800 members and guests attended the Royal Institute's reception on 23 May and there seemed to be general agreement among them that it was a most enjoyable function. The R.I.B.A. building always looks at its best when used for a party, the coloured frocks of the ladies and the contrasting black and white of the men's evening dress together giving vigour, gaiety and movement to a dignified, spacious and restrained interior. All the public rooms appeared to be full, yet there were no spots of congestion except perhaps here and there at the buffets.

The numerous official guests included Members of the Diplomatic Corps, Members of Parliament, the senior officials of many Government Departments, the Mayors, Chairmen and Town Clerks of several London municipalities, the Presidents and Secretaries of other professional bodies and learned societies, the Institute's own Honorary Fellows and Honorary Associates and many other persons distinguished in the arts, letters and sciences. The President and Mrs. Henderson received members and guests from 8.15 to 9 p.m., after which there was dancing, an interesting exhibition entitled *Opportunities Lost* in the Library, and an excellent marionette show. The Library exhibition consisted of drawings from the Institute's collection of projects which had never been realised or, as one guest put it, 'buildings which we have been spared.'

Elected to Royal Scottish Academy

Mr. Basil Spence, O.B.E. [*F*], has been elected an Associate of the Royal Scottish Academy.

R.I.B.A. Diary

25-28 JUNE. British Architects' Conference, Edinburgh.
MONDAY 30 JUNE. 6 P.M. Annual General Meeting. Library Group.

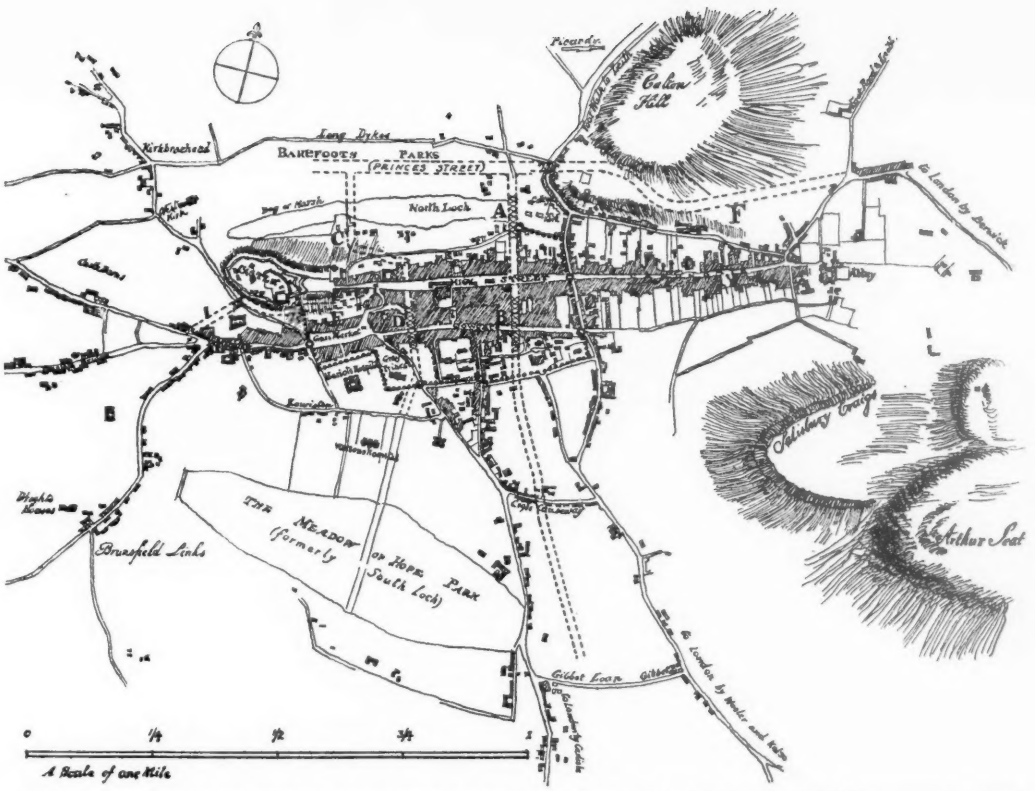


Fig 1. A map of Edinburgh, based on one by James Craig of 1763, showing Edinburgh just before the Georgian expansion. The city wall (1513) is shown by a heavy dotted line. High level roads begun in the 18th century are shown by chain lines and bridges by crosses. Key references: A, North Bridge (1772); B, South Bridge (1788); C, The 'Earthen Mound' (*c.* 1830); D, George IV Bridge (1836); E, Western Approach (1836); F, Regent Bridge and Road (1819). Reproduced from *A Civic Survey and Plan for Edinburgh*, prepared for the City Corporation by Sir Patrick Abercrombie [*F*] and Derek Plumstead [*A*]

The Lesson of Edinburgh*

By Robert Gardner-Medwin, B.Arch., Dip.C.D.(Liverpool), M.T.P.I., [*F*]

THE MEDIEVAL ROYAL MILE of Edinburgh, built astride the ridge of rock that slopes down from the Castle to Holyrood, and the Georgian 'new town' across the steep valley, are each of them famous throughout the world. They are startlingly different in character, and each as different again from our contemporary idea of what the form of a city centre or new town should be.

Yet medieval and Georgian Edinburgh, surrounded as they now are by the less notable accretions of the last century and a quarter, have many architectural features which not only move us because of their historical association, or because of their elegance and craftsmanship, but which also have important lessons for us in our present problems of town building—in spite of the fact that our modern communities must be designed to fit new social concepts and to solve quite different problems of transport and industry.

Three years ago, nearly 200 years after Craig won the famous competition for the new town (in 1760), the advisory *Civic Survey and Plan for Edinburgh*, by Sir Patrick Abercrombie and Derek Plumstead, was published and displayed to the public. At this time, hopes for ambitious post-war redevelopment still ran high. The present atmosphere of stark economy does not inspire a policy of sweeping reconstruction and adventurous building, such as that which characterised the Edinburgh Corporation's activities in 1760. The Corporation of today may feel a need to be more cautious if the official 20-year plan is to gain the approval of the many Government bodies, and the many more commercial bodies, who between them hold the purse strings.

Although the Corporation have not yet published their official development plan, they have made it clear that many of the 'bold measures' of the Abercrombie Plan will not appear in their official one, even as unofficial post-twenty-years proposals: it can be safely said that there will be no 3-level traffic way along Princes Street, no roofing in of the railway in Princes Street Gardens, no elimination of the main line station at Waverley, no elimination of the brewers on the Royal Mile!

Nevertheless, the splendid book of the Abercrombie Plan is by no means a back number, and for many years to come it will be well worth the study of architects and planners—particularly those who know the city well or come to visit it. The Survey, for instance, will be of permanent value, and may one day become a remarkable historic document. Dramatically it shows up the past glories of Edinburgh, the blunders of early industrial development, the slums that grew behind the historic façades, the expensive mistakes of recent unplanned development which ignored the earlier Edinburgh's unique example; and best of all, the maps show up the exciting potentialities of grafting modern planning ideas on to a distinguished historic growth. The proposals, however

* Based on lectures given to the Liverpool and Sheffield Architectural Societies, and to the Aberdeen Chapter of the R.I.A.S.

ambitious they may seem, display the most loving care for the medieval and Georgian forms, and for Edinburgh's natural landscape.

Advisory plans have almost had their day: they are scorned now that development planning has become a recognised routine of local government. But it is a good thing that one of the last and most imaginative of the advisory plans has been prepared for this city, which of all cities in the kingdom most needs imaginative solutions. The idea of an advisory plan was not to submit any precise solution, worked out in detail with the planning committee, but rather to inspire the official planners, and those for whom they plan, with a vision of the possible. By looking much further into the future than we are officially expected to look, the Abercrombie plan bids us beware of half measures and persuades us to look back over the historical experience of Edinburgh's growth, the better to project our minds forward in understanding the scale of the problems of the city in its entirety. Official plans must be realistic, but this need not prevent them from being as imaginative as the best of the advisory plans.

The official 20-year period (less than half the period taken to complete Craig's first phase of the new town, from St. Andrew Square to Charlotte Square in 1767-1819) seems pitiably short in terms of possible redevelopment programmes today, though it is a fair enough period for official sanction. If we do not try to think beyond this *legal* planning period (and there is nothing in the 1947 planning act to prevent our doing so) our development plans will be quite ineffectual and will look like expensive timidities to the next generation.

The first lesson which the planning of the new town of Edinburgh has to offer us comes not from Craig's plan but from Craig's client, the Edinburgh Corporation of that time. It is the lesson of the imaginative programme.

Growth of the Old Town

The spectacular contrast between the old and the new in Edinburgh is perfectly characterised by R. L. Stevenson in his *Picturesque Notes*:

'. . . meditative people will find a charm in a certain consonancy between the aspect of the city and its old and stirring history. Few places, if any, offer a more barbaric display of contrasts to the eye. In the very midst stands one of the most satisfactory crags in nature—a Bass Rock upon dry land rooted in a garden, shaken by passing trains, carrying a crown of battlements and turrets, and describing its warlike shadow over the liveliest and brightest thoroughfare of the new town. From their smoky beehives, ten storeys high, the unwashed look down upon the open squares and gardens of the wealthy; and gay people sunning themselves along Princes Street, with its mile of commercial palaces all beflagged upon some great occasion, see, across a gardened valley set with statues, where the washings of the old town flutter in the breeze at its high windows.'

This reminds us that there is nothing new (except the lifts) in our ten-storey blocks of flats; it also reminds us that the new town, unlike our 'socially balanced' new towns today, was essentially a town of the well-to-do, in spite of the narrow Rose and Thistle Streets, labelled by Craig 'for shopkeepers and others'. But before we examine the development of the new town I want to sketch briefly the story of the old town through the stormy centuries, for it is wild and interesting enough and will help us to appreciate the achievement of the new.[1]

In the 11th century, when Macbeth and his lady murdered King Malcolm, Edinburgh was a cluster of hovels around the castle rock. A century later the abbey of Holyrood was built by King David I at the foot of the long ridge, and the burgh of Canongate—now the lower part of the Royal Mile—was founded.

By the 14th century, when Robert—nephew of Bruce and first of the Stuart line—became king, the population was still only 2,000. It was at this time that the famous 'wynds' and closes were developed—the system of courts approached by footpaths which later became passages through the 'lands', or terraced tenements, of the High Street. It is worth peering into some of the courts and closes behind the cliff walls of the High Street and Canongate: for instance, Chessel's Court, Advocate's Close, Whitehorse Close (soon to be restored and made habitable again by Sir Frank Mears).

Edinburgh became the capital city in the 15th century. There was a spacious arrangement of houses with gardens grouped about the slanting land on either side of the High Street. But in 1513, after James IV and most of his nobility were slain by the English at Flodden Field, the Flodden wall was built as a defence from the South, the Nor' Loch forming a protecting moat on the other side (Fig. 1). With the city thus confined it was not long before the gardens became a huddle of houses and the plague began to take its toll. Though the population increased steadily, there was scarcely any extension beyond the wall until the mid-18th century.

There was a spell of peace in the reign of James V, and many fine houses, some of which remain today, were built on the High Street and on the Cowgate—the low level street which runs parallel to the High Street and which once gave on to the grazing grounds. 'Here live the nobility and magistrates of the city,' says a contemporary account, 'where nothing is mean or common, but everything magnificent.'

When the Scots refused Henry VIII's offer of betrothal of his son Edward to the infant Mary, the English fleet was sent to 'sack, burn and slay', and both Edinburgh and the port of Leith were largely destroyed. But the town was soon built up again more densely than before; and by the time that the first protestant Covenant was drawn up in the quarries of Calton Hill in 1557 a great pile of embryo skyscrapers had been built, many of them more than ten storeys high.

The procession of Mary Queen of Scots down the High Street one specially dismal day marked the beginning of the most calamitous period in Edinburgh's history. 'The very face of Heaven,' wrote John Knox, 'did manifestlie speak what comfort was brought to this country with her—to wit, sorrow, dolour, darkness and all impiety; for in the memory of man never was seyn a more dolorous face of the heavens than was at her arryvall . . . and the sun was not seyn to shyne two days befoir nor two days after.' Even Holyrood at this time must have suffered from the smoke and stench of the crowded town which wafted down the Royal Mile, and it is said that pungent herbs were burned there all day and night, 'against infection'.

There was great loss of trade to Edinburgh after James VI became James I of England, and the court moved south. The history of the next few years is full of hangings and riots and fires, collapse of morals, collapse of buildings—notably the highest of the skyscrapers, a fourteen-storey tenement of stone. Sacheverell Sitwell reminds us that 'the refinements and culture of the late 18th century had their roots amid the brutalities of the 17th.'

The 'Riding of the Parliament' at the last adjournment in 1706 marked the end of the medieval drama—save for one magnificent episode when the Young Chevalier and eighty horsemen appeared on the hill above Holyrood and rode down to take possession of the Royal Palace.

It was only seven years after the failure of the '45 Rebellion that the first proposals for the new town were made. Though many noble families lived on the Royal Mile, life in the crowded multi-storey 'lands', with their elementary refuse disposal, was unhealthy and hazardous. Dr. Johnson, while admiring the picturesque thoroughfare, remarked that to walk it at night was 'pretty perilous and a good deal odoriferous', and that he had observed 'many a full flowing periwig moistened into flaccidity'.

Beginning of the New Town

It is interesting to read the contemporary arguments for the new town, for they sound familiar to us in our present state of blitz and blight. Here is an example from the SCOTS MAGAZINE of 1752, which explains with a familiar ring of national pride the rapid growth of population which encouraged building on such a large scale:

'Since 1746, when the Jacobite rebellion was suppressed, a most surprising revolution has happened in the affairs of this country—the whole system of our trade, husbandry and manufactures, which had hitherto proceeded only by slow degrees, now began to advance with such rapid and

[1] In my historical sketch I have made good use of the following books:
Edinburgh, by Sacheverell Sitwell and Francis Bamford. John Lehmann, Ltd.
Old Edinburgh, 1947, and *Georgian Edinburgh*, by Ian Lindsay. Oliver & Boyd, Ltd., Edinburgh.
The Royal Burgh of Edinburgh, by the Outlook Tower Association. Oliver & Boyd.
E. J. Macrae's admirable account of the growth of Edinburgh in the *Civic Survey and Plan*.

general progression as almost exceeds bounds of probability. . . . A project for enlarging and beautifying this city could never have been suggested at a more proper juncture. . . . The meanness of Edinburgh has been too long an obstruction to our improvement and a reproach to Scotland. The increase of our people, the extension of our commerce and the honour of the nation are all concerned in the success of this project. . . . Several of the principal parts of the town are now lying in ruins . . . the opportunity is not to be neglected. . . . Let us improve and enlarge this city and possibly the superior pleasures of London, which is at a distance, will be compensated at least in some degree by the moderate pleasures of Edinburgh, which is at home. . . . As it is not the seat of government it can never become the centre of luxury and vice.'

In the enthusiasm for the new town the historic quarters of the old were neglected. Even the Royal Chapel of Holyrood, when the roof fell in in 1768, was ransacked by the populace and left to decay thereafter. There was a revival of interest in the old town at the time of Walter Scott, but it is only recently that public interest has really been aroused and some effort made—too late in most cases—to save what is left of the unique medieval heritage of the Royal Mile. The Corporation this year appointed Robert Hurd as their adviser on the development of the celebrated thoroughfare.

It is worth quoting Stevenson once more, on the effect of the new town on the old: 'There, when the great exodus was made across the valley, and the new town began to spread abroad its draughty parallelograms and rear its long frontage on the opposing hill, there was such a flitting, such a change of domicile and dweller, as was never excelled in the history of cities: the cobbler succeeded the earl; the beggar ensconced himself by the judge's chimney; what had been a palace was used as a pauper refuge; and great mansions were so parcelled out among the least and lowest in society, that the hearthstone of the old proprietor was thought large enough to be partitioned off into a bedroom by the new.'

Yet the new town did not come about so easily. Expansion was blocked by the Castle to the West, by Holyrood to the east, by the Burgh Loch to the south—later drained to form the famous 'Meadows'—and by the Nor' Loch in its deep valley to the north. Beyond the Nor' Loch lay good building land, but it was necessary to build a great bridge across the valley to reach it. To most of the citizens it seemed a wild project, but a planning-minded provost, George Drummond, persuaded his Town Council to build the vital bridge, 'without saying overmuch about extension,' as Ian Lindsay puts it, 'but with considerable advertisement regarding a new road to Leith.'

This was in 1762. Three years later the Council organised a competition for the layout of the new town, and this was won by James Craig, a young architect of twenty-eight. In spite of a false start when part of the bridge collapsed—it was a

Fig. 2. A recent air photo of central Edinburgh. Air Ministry Crown Copyright reserved

Fig 3. Charlotte Square. Designed by Robert Adam and built about 1800
Photo: Scott Brothers, Edinburgh

gigantic engineering task for the time—the 192 acres of Craig's plan was nearly covered by 1800.

In studying the incredible sixty years of classical scene-building, we recognise the daring and imagination behind the great building and engineering projects, and the way men triumphed over exceptionally difficult terrain. Many of Edinburgh's contours would be dismissed on the planner's map today as 'land unsuitable for building', and engineers would think more than twice before bridging the deep glens and ravines. Four great bridges had to be built to establish good communications between the old town and the extensive lands of the new. The last of these bridges, still sound, is the graceful one by Telford, which rears high over the Water of Leith with its ancient mills in the village of Dean.

There was, of course, much criticism of the scene-building. 'We then thought with despair of our green verdure,' said Lord Cockburn when the Earl of Moray's ground was being prepared for Moray Place. 'It would be some consolation if the buildings were worthy of the situation; but the northern houses are turned the wrong way'. And later, Stevenson was complaining that the architect was essentially a town-bird and had laid out the town with a view to street scenery alone: 'the country did not enter into his plan,—he had never lifted his eyes to the hills.'

The period of development of this Georgian town—which had been preceded by the Georgian building of the Parliament House and a great residential square (George Square) down by the Meadows on the south—can be divided into six main periods between 1767 and 1825.

First, there was Craig's simple, commonsense plan, closed at both ends by magnificent squares—one featuring a domed church, the other a memorial column. It was never imagined then that there would be any development beyond these squares. Nor was it imagined—though this is difficult to understand—that Princes Street would develop as a shopping thoroughfare. It was conceived as a residential street, open to the south—rigidly controlled, like the rest of Craig's plan, as to height and building line. Houses could vary in frontage and in detail, but, of course, it was never doubted that they would be anything but in the modern classic manner. Our problem of elevational control is not so simple today, even on George Street itself. Charlotte Square was the last part of Craig's plan to be developed, and here there was a first effort to treat a whole block of houses as an architectural unit (Fig. 3). This square was designed by Robert Adam one year before his death, and in spite of many deviations from his design it is one of the finest things in the new town. Sitwell calls it 'the first civilization that Scotland had known'! Today it is being jealously guarded by a special planning ordinance.[2]

Simultaneously with the Craig Plan, a new South Bridge was built to give access to a new University building, also designed by Robert Adam but drastically altered and completed long after his death. Rowand Anderson's dome, for instance, is not the one that Adam would have built, but he seems to have had the idea of raising it aloft so that it might command the city from the outskirts. Its elongated roundness is an effective foil for the more spiky silhouettes. The Holden plan for a University extension is a subject of much controversy today, for it threatens to engulf the sacred precinct of George Square. A competition for the development of one side of it has resulted in a compromise neo-Georgian solution. Students of the Edinburgh School of Architecture recently exhibited a more radical University redevelopment proposal in the area adjacent to George Square, with an exciting new campus, which left the remaining three sides of George Square intact for residential use.

In the second phase of the new town—begun by Reid and Sibbald in 1802—the Charlotte Square experiment was repeated in a more elaborate combination of terrace, crescent, square and circus (Fig. 6). This was to the north of Craig's plan.

The third phase was the layout of Calton Hill, by Playfair, in 1819. This resulted, many years later, in the monumental Royal, Regent and Calton terraces. At this time there was a superb example of engineer and architect in harness: the bridged approach to Calton Hill by Robert Stevenson and Archibald Elliot is one of the finest examples of architectural scenery in Edinburgh and shows us how practical and effective it is to treat a short length of street as a complete design unit. It is a monumental approach to the Calton Hill, but all on an unpretentious human scale. Walking up the incline of this street and, on turning the corner at the top, finding oneself confronted with the commanding, giant-size, cantilevered classic of St. Andrew's House, one is brought to an astonished halt.

The fourth phase, closely following, was the 'Modern Athens', which saw the building of the modern acropolis on the Calton Hill, with its porticoed observatory and the unfinished Parthenon by Playfair, its famous High School, built into the side of the acropolis, by Hamilton, and its two variations on the Monument of Lysicrates. This was the period of many public buildings all over the town in the form of Grecian monuments, including the Scottish Academy on 'the Mound'.

Then in 1820 (fifth phase) came another considerable residential layout beyond the west end of Princes Street followed in 1822 by the sixth phase: Gillespie Graham's cunning chain of circus, oval and crescent linking the earlier two residential units together. Gillespie's formal shapes are by no means suited to the irregular contours, and the way they turn their disorderly backs to the prospect over the Water of Leith is completely foreign to architectural behaviour today. Nevertheless, their stage effect, from the front, is very fine, and from their back windows there is a breath-taking view over the precipitous Dean Valley.

During this last phase, the painter Raeburn was responsible for the building of a delightful Regency street, called Ann Street, on the other side of the Water of Leith—more subtle and less monumental than the other contemporary work. (There is a measured drawing of it, by R. Scott Morton, in the *Civic Survey and Plan*. See also Figs. 4 and 5.)

But Edinburgh suddenly found itself over-built with large houses; and with the

[2] Mr. Derek Plumstead has pointed out that if the separate successive plans of the new town had been conceived as a comprehensive programme, and the earlier ones adjusted to relate to the later ones which overlapped them, it would have been possible to avoid the traffic difficulties caused, for example, by the development of shops along Princes Street, and by Craig's 'closed' plan on the George Street axis.

Fig. 4. Ann Street. Last phase of the 'new town'. One of the few terraces with front gardens
Photo: R. Scott Morton

Fig 5. Ann Street. Detail of house front
Photo: Alan Armstrong

Fig 6. Warriston Crescent. Functional middle-class architecture, about 1800
Photo: Alan Reiach

general disintegration as industries began to arrive and the Nor' Loch was drained to make way for the railway (a dramatic intrusion—quite wrong to think of concealing it!) some of the latest crescents and terraces broke off abruptly, and there are some to be seen which have never been completed.

Building for the next fifty years was chaotic. After that, the Victorian architects returned to formal residential planning, though with less inspiration. There are, however, some elegant Victorian suburbs, with mansions and twin villas more restrained, under the sobering influence of the Georgian period, than are found in most towns of England. It was at this time that Patrick Geddes, in his *Outlook Tower*, evolved his human philosophy of city and regional survey, and inspired our modern planning ideas.

Yet, in spite of Geddes, Edinburgh has learned no more from the picturesque assembly of the old town or from the formalised humanity of the new than any of our less favoured cities. I must allow myself one more quotation from Sacheverell Sitwell, because he has a poet's grasp of the meaning of architecture, and he has something to say on the new town which we should heed:

'The smooth façades of stone, with their meticulous joints chiselled to the inch, the wide windows, the doors and fanlights that have the grace and imperturbability of a classical quotation—and that amount of difficulty, it might be said, to the modern architect and his public who do not understand and will not listen, even in translation—the glimpses of firelight through the windows, the general restraint, this is Charlotte Square, and those impressions are but diluted, or spread more widely, over the streets that lie around. It is a perpetual delight, even now—more now, in fact, than ever before, and with an increasing pleasure that grows, year by year, as more and more of the old architectural inheritance of the kingdom is foolishly and wantonly destroyed—to walk through the terraces and crescents of the new Town. It is sterner building . . . than is to be found in Bath or Brighton, but this befits a more obdurate climate and a much older town.'

'Playfair and Gillespie,' he adds, 'were architects of the fourth or fifth order; but their works possessed cohesion, sound sense, and style. More than this is not needed; as can be seen in ten minutes walking in the New Town of Edinburgh.'

New Towns Today

What lessons, then, are to be learned from Edinburgh for our task today? 'Cohesion, sound sense and style,' says Sitwell. These, indeed, are attributes which we look for in the civic design of any period, and they are all too often lacking in our own.

The new town, in the light of today, has to be judged as a theatrical period piece. We can enjoy it all the more for that, but we have to admit that there is a world of difference in our present approach to housing and town planning. Instead of Gillespie Graham's chain of enclosures on the steep slopes of the Water of Leith, our solution would be slabs or towers of flats and terraced houses stepped on the contours, approached by diagonal roads, the rigid geometry of it in confident opposition to the wild landscape of the glen. Aspect, density, daylight factor and incidence of sun, not the Ionic Order, would be the grammar of our design.

Of course, we would be perfectly right; but we would be wrong to dismiss entirely the old classical vocabulary. There is much in it that we must discard, yet much that we might modify and adapt. The vista, for example. Must we forgo the exhilaration of climax that we feel when walking down George Street towards Charlotte Square? Are we too subtle to succumb to such a direct impulse? Of course, the modern traffic highway is no place for vista planning, but our new idea of pedestrian greenways might embrace it. In Edinburgh there are many subtle varieties of the vista. The focal point is not always a dome or a spire, but some topographical feature—the castle rock, the Calton Hill, or the hills of Fife beyond the Forth estuary, framed in stepped classical streets—on the rare pleasurable days when one can see the hills of Fife.

There are many special features we might note. I have already mentioned Waterloo Place as an example of the completely designed approach street to some important feature—the Calton acropolis in this case. There is also Princes Street—the idea of a one-sided shopping parade, marvellously justified in this case because it faces south and looks out upon the stirring panorama of the old town on the opposite ridge, and upon the unbelievable castle on the rock. The Princes Street idea has been tried in modern form by Jellicoe, in his Hemel Hempstead new town plan. The topographical drama is missing, but the interest is provided by a wide expanse

Fig 7. St. Bernard's Well on the Water of Leith, showing Telford's bridge and the western extremity of the 'new town' *From a lithograph by W. L. Leitch*

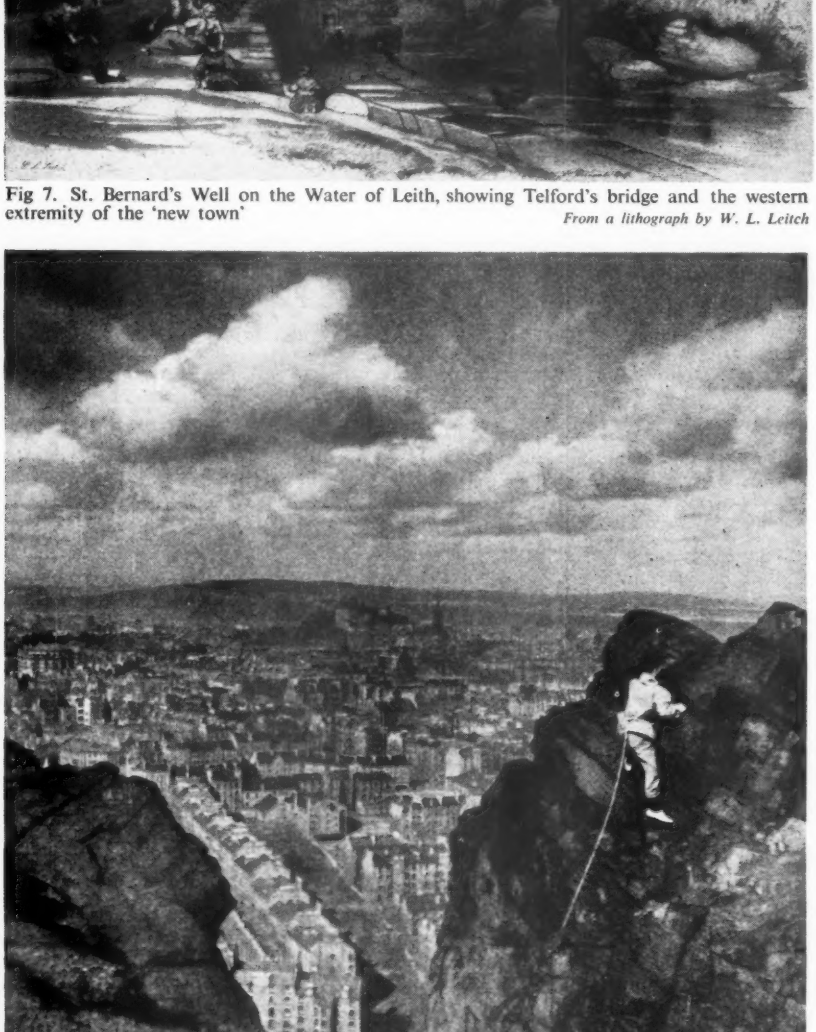


Fig 8. Climbing on the Salisbury Crags above the tenements of Edinburgh *Photo: Robert Grieve*

of landscaped water gardens, in which are sited many of the important public buildings. With good separation between shopping pavement and traffic highway, the Princes Street parade could become an exciting element in the modern plan.

Wide roads and traffic separation devices are a dominating feature of the modern town. The excellent relationship between streets and buildings is important in the Edinburgh new town. Today we have to approach the problem quite differently, but the relationship between roads and buildings is just as important, though more difficult to achieve. Edinburgh citizens have been getting excited lately about the threat to the new town from crudely designed lamp standards. Collaboration between engineer and architect in the design of the roads and road features themselves is something which needs to be taken seriously. Such collaboration in the building of the new town was very much more successful than it usually is today.

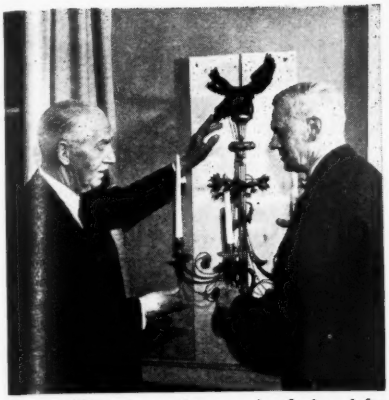
Then there is the fascinating problem of topography in relation to planning—the art of urban landscape. Edinburgh is a superb example of this. Sometimes the effects are quite accidental, but more often than not they are deliberate. Look up from the Dean Village to the high perch of the Gothic church, at the threshold of Telford's soaring bridge.

The casual visitor to Edinburgh is seldom aware of the way that the city is threaded with green spaces. Even if he gazes down from the Castle Esplanade, or climbs to the top of Arthur's Seat (as every good tourist should do) he will not realise the existence of the 'greenway system'—much more varied and topographically exciting than any we are likely to create in our model new towns of the 20th century. There is a shortage of recreation grounds but an abundance of parks, terraced gardens, treed escarpments, river walks, half hidden villages and almost wild glens with which the city abounds, and many of these are already threaded together forming the kind of continuous park system that we like to aim at nowadays. An example of this is the Water of Leith. Parts of it have been rather neglected lately, but with a few obsolete industrial buildings demolished here and there, an occasional embankment and pathway, it will be possible to create a quiet rural walk in the midst of the city, as the Abercrombie plan suggests.

The landscaping of the Water of Leith, judging from prints of the last century (Fig. 7), used to be more effective than it is today. Some of it is over-treed and needs to be cleared. But much of it is still an example of skilful tree-planting, dramatising the topography and grouped in pleasantly contrasting relationships with the clean-cut building masses. The placing of churches, monuments, wells and fountains, as also the siting and design of bridges, illustrates the importance attached to the visual elements in the evolutionary planning of the city. Edinburgh reminds us that our new science of planning will not alone produce for us the dignity of civic design or the charm of urban landscape: this is still the architect's responsibility.

In spite of Stevenson's complaint that the architects of the new town never lifted their eyes to the hills, I know of no other city in Great Britain where the country enters so much into the town and where even the mountaineer can hoist himself on dangerous crags above the very roofs (Fig. 8).

Visit of the President, Mr. A. Graham Henderson, A.R.S.A., Mrs. Henderson and the Secretary, Mr. C. D. Spragg, C.B.E., to Canada and the United States of America



The President presenting a pair of girandoles to James R. Edmunds Jr., a Past President of the American Institute of Architects, in the Octagon, Washington, the A.I.A. headquarters

Message by the President

WHEN THE COUNCIL decided that I, along with the Secretary, should accept the invitation of the Royal Architectural Institute of Canada to attend their Assembly in Vancouver and also while in America take the opportunity of presenting to the American Institute of Architects the gift already arranged for, I realised that I had been given an unprecedented opportunity to strengthen professional and social bonds already existing between us and them.

While the time available for our tour was of necessity limited to four weeks in America, our friends overseas made out a careful programme to ensure that the maximum number of professional contacts would be made at the more important centres. They arranged also for many official and social functions and needless to say for our personal entertainment. That we completed our tour without any visible sign of physical deterioration was not due to any lack of hospitality.

While the Secretary, with characteristic thoroughness, maintained a day by day record of meetings, luncheons, dinners, etc., which we attended, I feel that I would be failing in my duty if I did not give some general impressions which I formed when I was there. Such impressions cannot adequately convey the warmth of the reception we received throughout Canada and the United States.

We were early initiated into the mysteries and embarrassments of press interviewers and photographers. They saw my wife and myself off at Liverpool and they pursued us across Canada and back to New York for final interviews and photographs on our departure.

Though our first and naturally our main interest was in our friends in Canada, it was impossible not to link up the impressions formed there with those in Canada's greater neighbour to the south. Geographically these two countries are so obviously one. They speak, in the main, the same language. They have the same diverse racial sources and, perhaps greatest of all similarities, they have more or less the same optimistic outlook on the future of their countries, clouded only by the present doubtful international situation.

To speak of Canada is in a sense misleading. 'The Canadas' would be a more accurate description. The vast length of country north of the 49th Parallel and the great lakes divides itself geographically into sections each having its own characteristic of climate, historical development, industry, and—in the case of Quebec Province—language, but with all these differences they have two things in common and that is their intense belief in the future of their country and loyalty to the British Commonwealth.

So far as climate is concerned the notable difference is between the climate of the far western province of British Columbia, which approximates to our own, as against the remainder of the country where severe winters and hot summers are the rule.

Of the great cities, Ottawa as the seat of the Federal Government must take pride of place, not perhaps so much for what it is at present but for what the future developments planned propose to make it. I had the privilege of having the development plans and a large scale model explained to me by those responsible for their preparation and I was greatly impressed with the proposals, on some of which work has already been begun. One of the most important is the removal of existing railways to the perimeter, utilising the present lines of the railway and railway yards for the formation of boulevards, open spaces, etc. The plans are worthy of a capital city both on their broad lines and detailed arrangements and should make Ottawa one of the finest capital cities in the world.

The busy commercial cities of Montreal and Toronto are also being improved by the city authorities. Montreal has a very comprehensive development plan which I saw. It is designed to take advantage of fine natural features. Many modern buildings of excellent design are going up and an endeavour is being made to clear away earlier untidy development.

Quebec is in a sense unique. Its natural situation makes it an ideal gateway to Canada and I shall not soon forget our approach to it up the St. Lawrence with the banks of the river outlined in snow, ice floating down the river and the sun shining brilliantly. I was sorry, however, to note that some of the older buildings, particularly those timber relics of the French Colonial development, are approaching a ruinous condition. I could not help feeling that these interesting buildings—and, in fact, the older portion of Quebec—should be placed on the level of a national monument. Apart from older Quebec there is much of interest in the newer extensions, in particular the new University buildings, where a very spacious layout is in course of development.

Further west, the cities of Winnipeg and Calgary which I saw are spreading rapidly if, as is natural, to a certain extent untidily. Here again it is obvious that the powers that be have great pride in their cities and in their future development.

East of the Rockies, except in parts of Ontario, winter was still lingering, although the temperature was, if anything, too high, particularly in the trains. The buildings in the smaller towns one passed through, and in fact nearly all the housing in cities, towns and villages, was of wood but, the rule being to keep it painted white, had a general air of cleanliness. Some of the houses, apparently brick or rubble stone, were in fact wood with imitation brick and stone facing material.

Of the journey through the Rockies I need not say anything. The magnificent scenery is too well known. But I must refer to an interesting development at Banff, where the Alberta School of Fine Art has established a colony that promises to be extremely interesting. I was shown the drawings of the project—only a small portion of which has yet been completed.

Conditions in British Columbia are, as has been stated earlier, different from elsewhere in Canada. Spring was already well advanced in contrast to the bare grey ground and leafless trees in the east. The great cities of Vancouver and Victoria are developing rapidly. Vancouver is a city of fine buildings, the centre of a great timber industry. How I longed to take with me some of the millions of logs of timber floating down the rivers and in the coastal bays. I discovered also that they long to send them to us! Victoria is also a fine city and obviously one of the nicest places to live in. Several interesting modern houses have been erected here.

The only cities which time permitted me to visit in the United States were Portland, San Francisco, Chicago, Washington and New York, but apart from other cities further south I think these were representative of the best and perhaps also some of the worst in American development. All have their own individual characteristics. Portland has a fine natural setting and some very good buildings; San Francisco is in a sense unique among cities; Chicago, with no natural advantages other than Lake Michigan, struggling to undo some of the bad features of earlier development; Washington with its fine layout of parks and vistas; and finally New York, bursting its seams in every direction, particularly upwards. All these are too well known to need any description from me.

Of personalities I met I will only mention two, Roxburgh Smith and Glenn Stanton, the Presidents respectively of the Canadian and American Institutes. They set a standard of spontaneous and generous friendship which could not have been surpassed and inspired their colleagues in the various centres to accord us similar warm welcomes and personal friendships.

Statement by the Secretary

It was essential to keep a diary of our journey, but a bare record of this kind can convey very little of the warmth of our reception and the kindness and hospitality we received, so I am glad to accept the Editor's invitation to add a more personal note.

We travelled vast distances and visited many places and met a host of kind friends, and such was the zeal of our hosts in their desire for us to see all that was possible in the time available and to ensure that we enjoyed the maximum amount of hospitality that on some occasions the writing up of our happenings did not take place on the day they occurred; and I cannot be responsible for recording all that happened to Mrs. Henderson—sometimes she left the mere men for other delights with the wives of our guides—one suspects that shopgazing was the chief of these!

We knew from the cordial nature of the invitations we received that we should have a warm welcome both in Canada and the United States, but we could not possibly have realised beforehand how complete this would be. The picture was the same from start to finish of our trip—friends were waiting on the quay-side or at the station to greet us whether we arrived at the crack of dawn or late at night. Sometimes the reception party included members or friends I had met at 66 Portland Place, but more often they identified the three travel-worn strangers with—'Mr. Henderson?—Mr. Spragg?'. But we were strangers for a very brief while and the process of breaking down any barriers which might have existed was greatly facilitated by the intense capacity for friendship of our President and Mrs. Henderson. The Institute could have had no better ambassadors.

From my own personal point of view I found the visit of enormous value. I had the opportunity of discussing and comparing notes on a variety of professional problems, and members to whom I had been writing over the years are now living persons and good friends, and I hope they regard me in the same light. Architectural education was a subject more often talked about than any other and it is interesting, but perhaps not surprising, to find that the problem of practical training exercises the minds of our Canadian and American colleagues to much the same extent as it does ours. It was very pleasant to have the chance of a talk with Professor Percy Nobbs—mentally as alert and vigorous as ever—and with his successor at McGill, John Bland. There never seemed to be an opportunity of a real 'heart to heart' talk, which we had promised each other, with Eric Arthur, now a little greyer and more picturesque than he was when he left these shores. He combines the Professorship at Toronto with the Editorship of the R.A.I.C. JOURNAL. It would be improper for me to say which job he does the more successfully.

Then I discussed in the various Provinces the prospects for practice and employment in Canada for those who are contemplating going overseas. The long-term possibilities are limitless; there is a vast field of work to be done in a country which has immense natural resources and which is certainly under-populated in the architectural sense as compared with Great Britain, but even in Canada there are restrictions caused by the defence programme and—at the time we were there—by a shortage of steel. However, my good friend Cyril Carroll, the recently appointed Executive Director of the R.A.I.C., has promised to let me have a comprehensive report on the position in each Province.

Naturally also our respective administrative problems were discussed with the Honorary Officers and Executive Director of the R.A.I.C. and with Glenn Stanton, President, and Edmund Purves, Executive Director, of the American Institute of Architects. While they admire the closely knit structure of the R.I.B.A. with our frequent contacts through regular Council, Committee and General Meetings at headquarters, difficulties of distance render similar organisations impossible in Canada and the U.S.A. Though the growth of air travel is making communication easier it is interesting to reflect that Glenn Stanton has to travel something like 3,000 miles from his home town of Portland, Oregon, to preside over board meetings of the A.I.A. in Washington and Peter Thornton a like distance from Vancouver for council meetings of the R.A.I.C. in Ottawa.

We greatly admired the headquarters of the American Institute of Architects at the Octagon, a fascinating 17th century building in its garden setting, and needless to say our Canadian and American friends are equally admirers of our R.I.B.A. building and were very sorry to learn of Grey Wornum's illness. We met many friends of Grey.

Judging by the discussion at the Annual General Meeting of the R.I.B.A.—from which the President and I were absent—there is no risk of members allowing us to feel self-satisfied or complacent, but it was encouraging to find in what regard the R.I.B.A. is held in both Canada and the United States. The Editor did have the decency to blush slightly when I told him of the remarks about the R.I.B.A. JOURNAL made by one of our distinguished confrères in Chicago, Mies van der Rohe, who is also very proud of being an Honorary Corresponding Member.

The publicity given to our visit was tremendous, even for countries where newsprint is plentiful. I had had some slight experience of press interviews at home, but this was something quite different—on the quay, at the station or at the breakfast table, with the inevitable flashlight photographs. While we have seen many of the results, in other cases the news cuttings have not yet reached us, as frequently we were in the train when the papers containing our answers to the reporters' questions were published. Perhaps the most amusing description of Glenn Stanton (President A.I.A.) and the President and Secretary R.I.B.A. photographed together which appeared in a Portland, Oregon, paper was 'Top brass English speaking architects'! It is hoped that the Registrar A.R.C.U.K. will not regard this unwitting infringement of the Registration Acts by the Secretary R.I.B.A. too seriously!

I will say nothing of the more tangible hospitality extended to us—food and drink—except to say that both were most ample; the latter in spite of some of the curious liquor laws in operation in certain Provinces which required bottles to be secreted under the table if required at meals. More often the meals themselves were 'dry' and it speaks volumes for the courtesy and stamina of our colleagues that in spite of this they listened politely and applauded generously the innumerable speeches which the President and Secretary were called upon to deliver.

The President, in his message, has written of the architecture of Canada and the United States, and space does not allow of any description of the magnificent scenery through which we passed. Neither is it possible to mention by name all those who entertained us and showed us hospitality in so many charming ways, but in expressing our warmest thanks to the Royal Architectural Institute of Canada and the American Institute of Architects and the Provincial Associations and Chapters of both, reference must be made to the two Presidents, John Roxburgh Smith and Glenn Stanton. Mr. Roxburgh Smith, who has now handed over the Presidency of the R.A.I.C. to another good friend, Mr. R. Schofield Morris, was responsible with Mr. Carroll for making the wholly admirable arrangements for our tour, and we shall never forget his and Mrs. Roxburgh Smith's kindness; and we shall always remember with appreciation the hospitality and good friendship of Glenn Stanton.

Diary of the Visit

The Journey. The President and Mrs. Henderson left Liverpool on Tuesday 8 April by the *Empress of Canada* and arrived at Quebec on Tuesday 15 April. The Secretary flew from London Airport on Monday 14 April and, after touching down at Prestwick, Keflavik (Iceland) and Goose Bay (Labrador) reached Montreal on the morning of Tuesday 15 April.

The *Empress of Canada* met with rough weather and arrived behind schedule. This made it possible for the Secretary to travel with Mr. J. Roxburgh Smith [*F*], President of the Royal Architectural Institute of Canada, to Quebec to meet the President and Mrs. Henderson. The *Empress of Canada* docked at 6.30 p.m. In addition to Mr. Roxburgh Smith and the Secretary, Mr. Gerald Venne, representing the Quebec Chapter of the Province of Quebec Association of Architects, and

Mrs. Venne and several senior members of the Chapter met the President and Mrs. Henderson. On the quay the party had their first experience of many press interviews and photographs. Dinner was taken with Mr. Roxburgh Smith and Mr. and Mrs. Venne at the Chateau Frontenac hotel, where the night was spent.

Quebec. Wednesday 16 *April.* Accompanied by Mr. and Mrs. Venne, the party visited Laval University, where they had an interview with the Rector. There followed a tour of the ramparts and inspection of the church of Notre Dame des Victoires. The party then went to the City Hall to meet the Mayor and sign the visitors' book; the Mayor presented them with books on Quebec. Lunch, given by the Quebec Chapter with Mr. Venne in the chair, was at the Cercle Université. In the afternoon the party visited the Citadel and the site for the new University, where some of the buildings are now being erected. Tea was taken at the house and office of Mr. Lucien Mainguy. In the evening the two Presidents with Mrs. Henderson and the Secretary travelled to Montreal.

Montreal. Thursday 17 *April.* Breakfast in the Ritz Carlton Hotel was interrupted for an interview with a representative of THE MONTREAL STAR. In the morning, in the company of Mr. Roxburgh Smith and Mr. H. Ross Wiggs [*A*], the party visited the Chateau de Ramezay and then proceeded to the City Hall with Mr. Maurice Payette, President of the Province of Quebec Association of Architects, for a meeting with Mayor Houde. The visitors signed the visitors' book, were photographed by the press, and then inspected the new City Plan for Montreal in the company of Mr. Gordon McLeod Pitts [*F*], a Past President of the R.A.I.C. and a member of the Executive Council of the City of Montreal.

Lunch was taken at the Faculty Club, McGill University, with Mr. John Bland, the Principal of the School of Architecture, McGill University, in the chair. The lunch was also attended by members of the staff of the School and many Past Presidents of the P.Q.A.A. After lunch the School of Architecture was inspected, and there was an interview with the Principal of McGill University. The party then proceeded to the 'mountain' to see the magnificent views. They then visited the Shrine of St. Joseph, the Jewish Hospital and the New University of Montreal (Ernest Cormier [*F*], Architect), and were shown round by the Rector. Dinner was held at the Reform Club with the Officers and Past Presidents of the P.Q.A.A., where the President and Secretary had the opportunity of talking to many well-known members, including Professor Percy Nobbs [*F*]. After dinner a reception was given at the Arts Club by R.I.B.A. members practising in Montreal.

Ottawa. Friday 18 *April.* The party left Montreal for Ottawa at an early hour and on arrival in Ottawa were met by Mr. W. A. Ramsey, Chairman of the Ottawa Chapter of the Ontario Association of Architects, Mr. Cyril Carroll, Executive Director of the R.A.I.C., Miss Mary Bilton, Executive Secretary of the R.A.I.C., and Mr. H. Gordon Hughes [*A*]. After lunch at the Chateau Laurier the party were taken on a tour of Ottawa. Mr. and Mrs. Henderson and Mr. Spragg paid a formal call on the High Commissioner, Sir Alexander Clutterbuck, at his official residence. During the course of the tour a model of the national capital was inspected, and tea was taken at the Champlaine Bridge Restaurant. This was followed by a cocktail party at the house of Mr. Hughes and dinner at the Country Club given by the members of the Ottawa Chapter, where the usual speeches were made. The party entrained that night for Toronto.

Toronto. Saturday 19 *April.* The visitors were met at Union Station, Toronto, by Mr. N. H. McMurrich, Chairman of the Toronto Chapter of the Ontario Association of Architects, and Mr. John D. Miller, Secretary of the Ontario Association. They were accommodated at the Royal York Hotel, which claims to be the largest hotel in the British Empire, where they were interviewed by the press. Mr. R. S. Morris, the Hon. Treasurer of the R.A.I.C., drove the President and Secretary round the city and then entertained them to lunch, together with many leading Toronto architects, at the York Club. In the afternoon there was a reception at the Toronto Hunt Club, given by members of the Toronto Chapter, at which the guests were received by Mr. Gordon S. Adamson (acting as Chairman in the absence of Mr. Earle L. Sheppard, President of the Ontario Association), Mrs. Adamson, Mr. and Mrs. Graham Henderson, Mr. and Mrs. McMurrich and Mr. Spragg. The reception was attended by a large number of architects and persons prominent in Toronto, and there were more press interviews and photographs. The evening finished with a cocktail party and buffet supper at the house of Mr. A. S. Mathers, at which many Toronto architects and their wives were present.

Niagara Falls. Sunday 20 *April.* The party visited Niagara Falls as the guests of Mr. and Mrs. R. S. Morris and Mr. and Mrs. Gordon Adamson. Lunch was taken at the Brock Hotel, Niagara, and the Carillon Tower ascended. The drive to and from Niagara was full of interest, and the country lovely with blossoming fruit trees. After returning to Toronto, the party left for Chicago.

Chicago. Monday 21 *April.* After a night in the train the visitors were accommodated at the Conrad Hilton Hotel, formerly the Stevens Hotel, which claims to be the largest in the world, the main building being 25 storeys high and containing 3,000 bedrooms. Mr. Norman J. Schlossman, the Second Vice-President of the American Institute of Architects, took charge and a first visit was made to a new block of apartments on the shore of Lake Michigan by Mies Van der Rohe (H.C.M.). They were able to inspect the top apartment on the 25th floor occupied by Mrs. Byron Harvey, Junior. After lunch with Mr. Schlossman and Mr. Paul Gerhardt, City Architect of Chicago, at the Drake Club, there was a long drive round the city, including the adjoining suburb of Evanston, and in the evening the Chicago architects and their wives entertained the visitors at dinner at the Tavern Club on the 26th floor of 333 North Michigan Avenue. Those present included Mr. Alfred Shaw, who acted as host, and Professor Mies Van der Rohe. There were the usual speeches and the meeting ended with a singsong at which some of the American hosts tried, with difficulty, to remember the words of the parodies of Gilbert and Sullivan songs which have been quoted in the JOURNAL OF THE AMERICAN INSTITUTE OF ARCHITECTS.

Journey to Winnipeg. Tuesday 22 *April.* The party left Chicago for Winnipeg. During the journey to St. Paul (where there was a change of trains) the visitors travelled through the Mississippi Valley, which was extensively flooded. Many houses and cars were seen submerged by floods, and part of the rail track was under water. The night was spent in the train.

Winnipeg. Wednesday 23 *April.* The visitors were met at the station by Mr. G. Leslie Russell, President of the Manitoba Association of Architects, who was accompanied by Mr. Casey. There was time for a swift drive round the city, during which the Parliament Building was inspected (Architect: Frank W. Simon). Before the departure for Calgary there were some hurried press interviews on the train.

Calgary. Thursday 24 *April.* The party arrived at Calgary at 8.30 a.m. and were met by Mr. V. F. R. Berton, Chairman of the Calgary Chapter of the Alberta Association of Architects, Mrs. Berton and several leading members of the Association. After depositing the luggage at the Palliser Hotel and being interviewed by representatives of THE CALGARY HERALD, when some photographs were taken, the visitors were taken in two cars to Banff. After lunch at the Cascade Hotel, the famous Banff Springs Hotel (which was not officially open) was thrown open for the visitors' inspection; the sulphur pools were also visited and tea was taken at the School of Fine Art. An interview was also arranged with a picturesque sergeant of the Mounties and more photographs taken. On return to Calgary there was a dinner with the members of the Calgary Chapter and their wives at the Palliser Hotel, with Mr. Berton in the chair.

Journey to Vancouver. Friday 25 *and Saturday* 26 *April.* Accompanied by Mr. Cyril Carroll, Executive Director of the R.A.I.C., the visitors left by train, travelling through the picturesque scenery of the Rockies in the observation car. The night was spent in a more primitive hotel at Sicamous. Next day the scenic journey continued, Vancouver being reached at 10 p.m. The party were met by

Mr. Peter M. Thornton [*A*], President of the Architectural Association of British Columbia, Mrs. Thornton, and leading members of the profession in Vancouver.

Vancouver. Sunday 27 *April.* Mr. Thornton took the President and Secretary for a drive over the suspension bridge into North Vancouver and through part of the estate which is being planned on behalf of 'British Properties', a subsidiary of the Guinness concern. The estate is a very fine example of planning by private enterprise. In the late afternoon there was a cocktail party at the house of Mr. Fred Townley, a leading Vancouver architect, which was attended by members of the Chapter and their wives and by leading citizens. There followed a small dinner party at the house of Mr. Thornton. Mr. Thornton's house, which he had designed for himself, was an interesting essay in contemporary design, and had the unusual feature of a spiral staircase in the centre of the living room.

Victoria. Monday 28 *April and Tuesday* 29 *April.* The visitors left for Victoria on one of the fine C.P.R. ships. Arriving in the afternoon, they were met by some of the leading architects of Vancouver Island and entertained at a cocktail party, followed by dinner in the house of Mr. F. W. Nicholls. Next day an official lunch was arranged at the Union Club by Mr. John Wade [*A*] who, in addition to being in practice, is a Naval A.D.C. to the Lieutenant Governor of British Columbia; this was attended by practically all the architects in Vancouver Island with their wives. After the lunch Mr. Wade took the visitors for a drive to a distant part of the Island.

Vancouver. Wednesday 30 *April to Saturday* 3 *May.* The visitors returned to Vancouver to take part in some of the official functions of the Annual Assembly of the Royal Architectural Institute of Canada. The first of these, which took place in the evening after their arrival, was the dinner given by the President of the R.A.I.C., Mr. Roxburgh Smith, to the members of the 1951 Council, Editorial Board and Architectural Training Committee and their wives.

A large part of the next morning was spent in press interviews, first with Mr. Roxburgh Smith, other members of the R.A.I.C., and the President, R.I.B.A., and then with Mr. and Mrs. Henderson and Mr. Spragg alone; many photographs were taken. The President and Secretary attended part of the discussion of the Annual Assembly at which reports of the Council, the Honorary Treasurer and Committees were presented to the general body of members of the R.A.I.C. This was followed by an official lunch, at which an address of welcome was given by the Mayor of Vancouver. In the evening there was a cocktail party arranged in connection with the Manufacturers' Exhibition, followed by a 'stag' dinner. The ladies had dinner and a fashion show at the Royal Vancouver Yacht Club. After the 'stag' dinner was over the men went to the Yacht Club to join the ladies and saw part of the fashion parade, which was followed by dancing.

Next morning there was an official visit to Vancouver City Hall (designed by Mr. Fred Townley), where the President, together with the President of the R.A.I.C. and other prominent members of the Canadian Institute and the Secretary, were received by the Mayor and signed the visitors' book. This was followed by a luncheon given by the Plywood Manufacturers' Association of British Columbia. In the afternoon an interesting ceremony took place, namely, that of the installation of new Fellows of the R.A.I.C. These included Mr. Henderson and Mr. Glenn Stanton (President of the American Institute of Architects), who were invested as Honorary Fellows. The Chancellor of the College of Fellows is Mr. Forsey Page [*F*]. Space does not permit full details of the ceremony to be given, but it should be explained that Fellowship of the R.A.I.C. is a special distinction confined to 8 per cent of the membership. The Fellows and those who are about to be appointed wear gowns and mortar boards, and the candidates are invested with collars and medallions, which they are instructed to wear on all appropriate occasions. In addition the Fellows and new candidates are required to make a solemn declaration concerning the responsibilities and duties which they have accepted. The whole ceremony was most impressive.

In the evening there was a supper dance in the Hotel Vancouver. This took the place of the Andrew Cobb Memorial Dinner, which should have been held at Grouse Mountain Chalet. (This dinner had to be cancelled as some of the party were unwilling to use the ski-lift, which was the only means of access since the road was impassable owing to recent heavy falls of snow.)

On the last day at Vancouver, Saturday 3 May, the President, Mrs. Henderson and the Secretary, accompanied by Mr. and Mrs. Roxburgh Smith and other leading members of the R.A.I.C., paid a formal call on the Lieutenant Governor of British Columbia and Mrs. Wallace at their private house. This was followed by the R.A.I.C. luncheon, at which Mr. Harry Simmonds occupied the chair, and speeches were made by Mr. Glenn Stanton and Mr. Spragg.

The final ceremony of the Annual Assembly took place in the evening, namely, the Annual Dinner, at which Mr. Roxburgh Smith presided. After the dinner, Fellowship diplomas were presented by Mr. Roxburgh Smith and speeches were made by Mr. Stanton and Mr. Henderson. These were followed by the presentation of a totem pole to Mr. Henderson by the R.A.I.C. for permanent exhibition at the R.I.B.A. Headquarters. The guest speaker at the dinner was the President of the University of British Columbia. Before the dinner ended Mr. Roxburgh Smith read the list of the newly appointed officers, and concluded by handing over the Presidential gavel to Mr. R. Schofield Morris. After dinner an informal, friendly and farewell party took place.

This was in many ways a sad occasion, as it marked the parting with many old and new friends, some of whom had been met with during the earlier part of the President's tour in Eastern Canada.

Journey to Portland. Sunday 4 *May.* Mr. and Mrs. Henderson and Mr. Spragg, accompanied by Mr. Glenn Stanton, left Vancouver for Portland, Oregon, and in spite of the early hour Mr. and Mrs. Roxburgh Smith were at the station to see them off. It was a most interesting journey down the Pacific coast, although, unfortunately, there was no time to see Seattle as there was only a short wait between trains. After arrival at Portland there was a private dinner party at Mr. Glenn Stanton's house.

Portland. Monday 5 *May.* Early in the morning Mr. Stanton took the visitors for a drive up the Columbia River to see the magnificent scenery, which included snow-covered Mount Hood and Multnomah Falls. After the return to Portland he was host at a lunch at the Arlington Club, to which he had invited many prominent citizens; there were many speeches. Before lunch the President and Secretary were introduced to Senator Lodge, who was in Portland campaigning on behalf of General Eisenhower's candidature for the Presidency of the United States. Mrs. Henderson was entertained to lunch at the University Club. Following lunch, Mr. Stanton, together with one of his associates, took the President and Mr. Spragg round the city, and on the return to his office there were yet more press interviews and photographs. The party then left for San Francisco, arriving early on the following morning.

San Francisco. Tuesday 6 *May.* During the course of the journey through the night a message was received on the train stating that the party would be met at San Francisco Ferry Building by representatives of the Northern California Chapter of the American Institute of Architects. Consequently, on arrival Mr. A. R. Williams, Vice-President, and Mr. W. H. Rowe and Mr. Charles S. Pope, Directors of the Northern California Chapter, met the party and accompanied them to the Hotel Mark Hopkins. Lunch was taken at the Sir Francis Drake Hotel with Mr. Pope and Mr. and Mrs. Tivol. Mr. Henderson and Mr. Spragg then made a tour through the centre of the city and saw, among other interesting buildings, the new store designed by Frank Lloyd Wright—of which the proprietor, Mr. V. C. Morris, seemed completely to typify the satisfied client. The party were then taken by car to see many other buildings, including Mr. Grey Wornum's house, which Mr. Wornum designed himself. There was a cocktail party at the University Club given by the Northern California Chapter at which many of the local architects and their wives were present, and again there were more press interviews and photographs. Afterwards there was dinner at the club with the

members of the Chapter and their wives, and many more speeches. Following the dinner some of the members conducted the visitors on a walk through Chinatown. The evening finished at the 'Top of the Mark'.

Journey to Washington. Wednesday 7 *May to Saturday* 10 *May.* In the morning Mr. and Mrs. Henderson and Mr. Spragg started on the long journey to Washington. This took them through the States of California, Nevada, Utah, Wyoming, Nebraska, Iowa and Illinois. The scenery was full of interest, especially through Nevada and the Sierra Mountains, where snow lay thick and was still falling. There was a glimpse of Reno late at night in which the chief feature was the flashing signs of the gambling haunts. Twice the train ran into floods; the first time was after passing over the Lucin Causeway, which takes the railway for thirty miles over the Great Salt Lake; there for many miles gangs of men were watching the safety of the line. The second time was near Clinton, where it appeared that the Mississippi floods had not yet reached their highest.

Washington. Saturday 10 *May and Sunday* 11 *May.* On arrival at Washington the visitors were met by Mr. Edmund R. Purves, the Executive Director of the American Institute of Architects, and taken to the Carlton Hotel. The President and Secretary then went to the Octagon—the Headquarters of the American Institute of Architects—for press interviews and photographs; the interviews including those with representatives of THE ARCHITECTURAL RECORD and THE ARCHITECTURAL FORUM.

At the lunch which followed, Mr. Graham Henderson formally presented the pair of girandoles, which are a gift to the American Institute of Architects from the Royal Institute. (These were illustrated in the May JOURNAL.) They are to form an item in the furniture of a room in the Octagon in which, in 1814, President Madison signed the Treaty of Ghent, which inaugurated the long era of peace between the United States and Great Britain. The lunch was attended by several leading Washington architects and their wives, and there were representatives from the British Embassy present; the chairman was Mr. James R. Edmunds Junior (H.C.M.) of Baltimore, a Past President of the American Institute of Architects.

In the afternoon Mr. Frederick Gutheim, accompanied by Mrs. Gutheim, took Mr. and Mrs. Henderson and Mr. Spragg on a visit to the Capitol, where the party were met by Mr. Lynn, the resident architect for the building. A detailed tour of the Capitol was followed by a drive round the many fine Government buildings in Washington, the Washington and Lincoln Monuments and the Pentagon. On the return journey the party stopped for tea at the house of Mr. Purves. In the evening there was a private dinner party given by Mr. Slocum and Mrs. Kingsbury.

On the Sunday there were no official functions, and Mr. Henderson and Mr. Spragg were able to take a quiet stroll to see some of Washington's public buildings. In the afternoon they visited Mount Vernon (the home of George Washington); after which they went to Gunston Hall, which has been recently restored, furnished with period pieces and handed over to the American equivalent of our National Trust. The owners, General and Mrs. Montague, have moved into a new house designed for them by Mr. Fiske Kimball (H.C.M.), where they entertained the visitors appropriately with mint juleps, the house being in Virginia.

New York. Monday 12 *May and Tuesday* 13 *May.* The party travelled from Washington to New York and in the afternoon had a little time for shopping. On the next day, after attending to certain requirements in regard to U.S. income tax, the President and Secretary were entertained to lunch at the Century Club by Mr. Ralph Walker and his partner, Mr. Stephen F. Voorhees (H.C.M.), both Past Presidents of the American Institute of Architects. The British visitors regarded it as a great tribute that so many distinguished New York architects had accepted the invitation to meet them. These included Mr. Francis Keally, Mr. Charles Butler, Mr. Harvey Corbett [*F*], Mr. Wm. Adams Delano (H.C.M.), Mr. Howard Greenley, Mr. Julian Clarence Levi, Mr. Wallace K. Harrison (H.C.M.), Mr. Robert McLaughlin, Mr. Robert O'Connor, Mr. J. K. Smith, Mr. Edgar Williams, Mr. John C. B. Moore, Mr. William Lamb and Mr. Louis Skidmore. Again there were several speeches.

After lunch Mr. Wallace K. Harrison showed Mr. Henderson and Mr. Spragg over the United Nations Building. They also had a quick inspection of the new Lever Building, which has just been completed, and then had tea with Mr. and Mrs. Harrison at their apartment.

In the evening the New York Chapter of the American Institute of Architects entertained the visitors at dinner at the Waldorf Astoria Hotel; Mr. Francis Keally, President of the New York Chapter, presided. Following dinner a meeting was held in an adjoining room at which welcomes were paid to Mr. and Mrs. Henderson and Mr. Spragg, and suitably acknowledged. Mr. Keally read the following cablegram from Mr. Glenn Stanton, which had not reached Washington in time to be read there: *To A. Graham Henderson, President, R.I.B.A. The American Institute of Architects is proud to welcome you and your party to the Octagon. I regret that I am unable to greet you personally. I know, however, that the Institute will be well represented in expressing our gratitude for your visit. You, with Mrs. Henderson and Bill, have left many, many friends in Canada and the United States. Affection and best wishes follow the wake of your long trail. Thank you so much for coming. With all best wishes to you and to the Royal Institute of British Architects. Sincerely, Glenn Stanton, President, The American Institute of Architects.*

Following the presentation of a diploma for the best block of apartments built in the New York area, a discussion took place on architectural education, and this went on to a fairly late hour. It is perhaps of interest to note that many of the problems which are being discussed in the United States are identical with those which are troubling us on this side.

The End of the Tour. On Wednesday 14 May, Mr. and Mrs. Henderson sailed in the *Queen Mary* for Southampton, and in the afternoon Mr. Spragg returned by air from New York to London Airport. A rough calculation showed that the total mileage covered was between 14,000 and 15,000 miles.

Letter from Mr. J. Roxburgh Smith [*F*], President, R.A.I.C., to the President, R.I.B.A.

My dear Graham Henderson,

In the aftermath of an Annual Assembly some impressions may admittedly be obscure, but there is no discernible trace of this element while we consider the honour and pleasure experienced by our members in greeting your genial self, Mrs. Henderson and Secretary Spragg. A rare trio of Ambassadors, whose trail across Canada is indelibly marked by good fellowship and professional appreciation.

If we may be permitted to say so at this close range, we feel that the benefits derived from your visit were well and fairly distributed. Your expressed desires, to meet and see us as we are in Canada and to assist in further development of our cordial relationships have, we are sure, Sir, been fulfilled. On our side, apart from the other elements indicated, the generous 'Press' which resulted from your presence has been of inestimable value to the profession in general, and this aspect will be remembered with due appreciation. May we hope that this pleasant incident in the course of our relationship is only the forerunner of a reciprocal arrangement which could have far-reaching mutual benefits.

We are satisfied in thinking that your visit to the United States provided added interest to the extensive round-up and assisted very materially in strengthening our professional as well as our human affinities.

No doubt much more remains to be said and reports from both sides of the Atlantic will be awaited with interest. In the meantime, Mr. President, please be good enough to convey to your Officers and Council our very warm greetings, along with our assurance that the unanimous approval which they gave to your visit was highly justified, in the light of the enjoyable and excellent results achieved. We were all glad to hear of your safe arrival home, and trust that the physical effects of your travels are not too pronounced.

With kind personal regards and all good wishes to yourself, Mrs. Henderson and Mr. Spragg.

Yours sincerely,

J. ROXBURGH SMITH.

Inigo Jones: A Revaluation

By Margaret Whinney, D.Lit., F.S.A.

IT WILL BE three hundred years on 21 June since Inigo Jones died. It is therefore an appropriate moment to review, in the light of the research that has been done in the last fifty years, his position in and influence on English art. The figure that has now been revealed, shadowy though it is, and perhaps always must remain in many respects, will be found to differ a little from the Jones of the 18th and 19th century critics. He appears, indeed, both less and more of an artist, less inventive as an architect, but far more influential in English art as a whole. Indeed, in this respect he is unrivalled, for not even Sir Joshua Reynolds was responsible for so profound a revolution.

The revolutionary character of Jones's architecture has, of course, always been well appreciated. The complete change in character between Hatfield House (1607-11) and the Queen's House at Greenwich (begun in 1616) was apparent both to his own and every succeeding generation. It is, however, round the Banqueting House at Whitehall (1619-22) that the Jones legend developed. Here for the first time Italian palace architecture was created in England by a man who understood not only the vocabulary of classical forms but also the theory of proportions, of the relation of part to part, and of each to the whole, which was the foundation of Renaissance practice. The distinction of this achievement, by a man who was entirely self-taught, should not be belittled. Jones was the son of a cloth-worker, and according to Sir Christopher Wren was apprenticed to a joiner in St. Paul's churchyard. How he obtained the means to travel to Italy by 1601 (the date inscribed in the flyleaf of his Palladio, apparently bought in Venice, and now at Worcester College, Oxford) is uncertain, though Mr. John Summerson has recently suggested to me that he went in the train of the Duke of Rutland, with whom he was certainly in contact in 1603. What is however evident is that he possessed a mind at once sensitive and diligent, for during this and the other well-documented journey of 1613-14 he acquired a remarkable knowledge of Italian art.

It is worth while to attempt to analyse precisely what interested Jones most. The Palladians of the 18th century regarded him as a kind of patron saint of their circle. They no doubt knew, as Mr. Grant Keith has shown in this JOURNAL[1], that Jones had bought a number of original Palladio drawings. These later formed part of Lord Burlington's collection and are now among the Burlington-Devonshire drawings at the R.I.B.A. They knew, too, of his annotated Palladio, for the notes (or most of them) were published by Leoni in his edition of 1715. They saw in the Banqueting House a building in which Palladio was freely and constantly quoted, and they decided that Jones was at once an English reincarnation of the great Vicentine and the founder of a new school of architecture. This view was to persist at least until Sir Reginald Blomfield wrote his *Short History of Renaissance Architecture 1500-1800* in 1900 (reprinted 1914).

The Burlingtonians, however, in spite of, or perhaps, indeed, because of their veneration of Palladio, made no attempt to assess his architecture by comparing it either with the antique or with the work of his Italian predecessors. Nor did they analyse, in this sense, the buildings, notes and drawings of Inigo Jones. (Or at least they made no verbal criticism, though it is surprising to see, upon close examination, how far the Jones drawings, published by Kent in *The Designs of Inigo Jones*, or by Colen Campbell in *Vitruvius Britannicus* have been silently 'corrected' when they appeared un-Palladian.) Jones's notes in his Palladio reveal a careful, scholarly mind, occupied with recording the comparative use of detail by Palladio and the Ancients, and there are almost as many comparisons with books, those of Serlio, Antonio Labacco, and even Philibert de l'Orme, as with actual buildings. He is deeply interested in rules and theories, eager to seize and sift the knowledge of the previous century, and of the golden age of antiquity. The same interest in the details of other artists' work appears in the Italian Sketch Book, now at Chatsworth. Almost all these drawings have been proved by Miss Joan Sumner-Smith to be copied from Italian engravings, and are discussed by her in the July number of the BURLINGTON MAGAZINE. They are, admittedly, notes and drawings made with the object of acquiring a vocabulary of Renaissance art, but they are the work of an eclectic and not of a highly original artist.

The same approach can be seen in the design of the Banqueting House. It is well known that in the two preliminary drawings at Chatsworth (the second of which is illustrated here) (Fig. 2) and the executed building (Fig. 3) Jones takes a variety of themes from Palladio's book rather than from his executed buildings, and rearranges them. The first drawing, which has a central pediment and a sloping roof, is an adaptation of part of Palladio's 'Design for a Venetian House'. The second, in which the pediment still appears, though a balustrade masking the roof is sketched in as an afterthought, uses the window treatment of the Palazzo Porto Colleoni at Vicenza (Fig. 1) (though the features are rearranged) and introduces the frieze of swags at the level of the capitals which appears in Palladio's plate of the Palazzo Thiene though not in the executed building.

Jones, however, is not thinking in purely Palladian terms. The palaces of Vicenza are full of surprises, of double and conflicting rhythms (the window treatment of the Palazzo Porto Colleoni with one rhythm created by the alternating pediments and another by the figures seated on them at the centre and ends, is a good enough example), by the unexpected stripping off of a top layer of a seemingly solid rusticated wall to reveal a smooth surface beneath—by characteristics, in fact, which are now generally termed Mannerist. Nothing of the kind appears in the Banqueting House. All Mannerist elements, which were the expression in architecture of the mental and spiritual turmoil of Italy before and after the Council of Trent, are purged (with the single exception of the breaking of the entablature over the Orders which has, at least, the authority of late antique work such as the Arch of Constantine). In its clarity, in the discretion with which a gentle emphasis is laid on the centre (the strong emphasis of a central pediment would have been amiss in a building with no central door), and indeed in the logic of the whole façade, Jones seems to combine Palladian detail with a Bramantesque directness.

It is true that the division of the outside into two main storeys does not suggest the single space within. But the only architect so far in Italy to venture on the expression of a single space interior in the design of the exterior had been Michelangelo at St. Peter's. The sole reference Jones makes to Michelangelo is derogatory, and there is nothing at all in his work at any time of his life to suggest that he would have approved of a Baroque enlargement of the unit of design, which had already, indeed, been suggested in Palladio's last works (e.g. the Palazzo del Capitano and the so-called Casa del Diavolo in Vicenza).

A similar return to the standards of the early 16th century, that is to the school of Bramante and Raphael, can be seen elsewhere in Jones's architecture, for there, rather than in Palladio's buildings, could he have found the spirit of antiquity. Far

From a self-portrait ink drawing now in the R.I.B.A. Library

(1) W. Grant Keith. 'Inigo Jones as a Collector.' R.I.B.A. JOURNAL, XXXIII, 1925, p. 95.

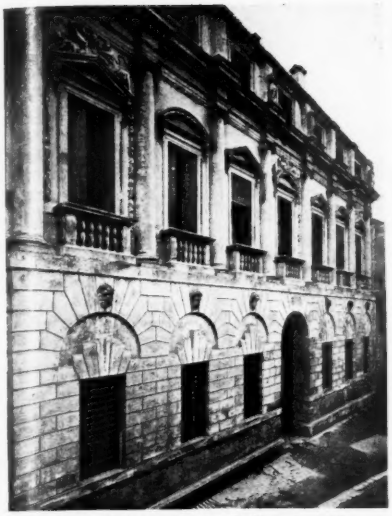


Fig. 1: The Palazzo Porto Colleoni at Vicenza by Palladio

too little attention has been paid to the chapel of Marlborough House (now again restored after damage suffered in the last war), partly because it was sometimes wrongly assumed that the structure was materially altered in the reign of Charles II. The description of the building by Sir Roger Pratt, and still more the building accounts of 1626-27, prove that the noble coffered roof (Fig. 4) is by Jones, and that only the east end woodwork is later(2). There can be no doubt that the architect's attention had first been drawn to the grandeur of such a motive when he was checking Palladio's reconstructions of antique buildings(3), for the exact type of coffering used appears among the details of the ruined temple of the Sun and the Moon(4). But such a motive is nowhere used by Palladio himself, though Jones could have seen and admired the use of coffered vaults (though not precisely of the same pattern) in Bramante's choir of S. Maria del Popolo, Rome, in the background of Raphael's *School of Athens*, in the entrance to the Farnese Palace and the Villa Madama, and in St. Peter's itself. Indeed, the simple gravity of the building, with its unbroken cornices, is far nearer to Bramante's interpretation of the antique than to the architecture of Palladio.

Similarly, the façade of St. Paul's, Covent Garden, which was an exercise in the Tuscan Order, can hardly be termed Palladian. And the great portico added to the west end of St. Paul's Cathedral (which with the Banqueting House was judged by Jones's contemporaries to be his major achievement) must surely go back to a classical prototype—though, perhaps via one of Palladio's reconstructions—rather than to the applied Orders of Palladio's

(2) See G. H. Chettle, COUNTRY LIFE, LXXXIV, 1938, 450.
(3) *I Quattro Libri dell'Architettura*, Book IV.
(4) *Ibid.*, Bk. IV, Cap. x.
(5) This is the set published by Kent, together with a number of drawings related to it. See article by the present writer, 'John Webb's drawings for Whitehall Palace', *Walpole Society*, XXXI, pp. 45-107.

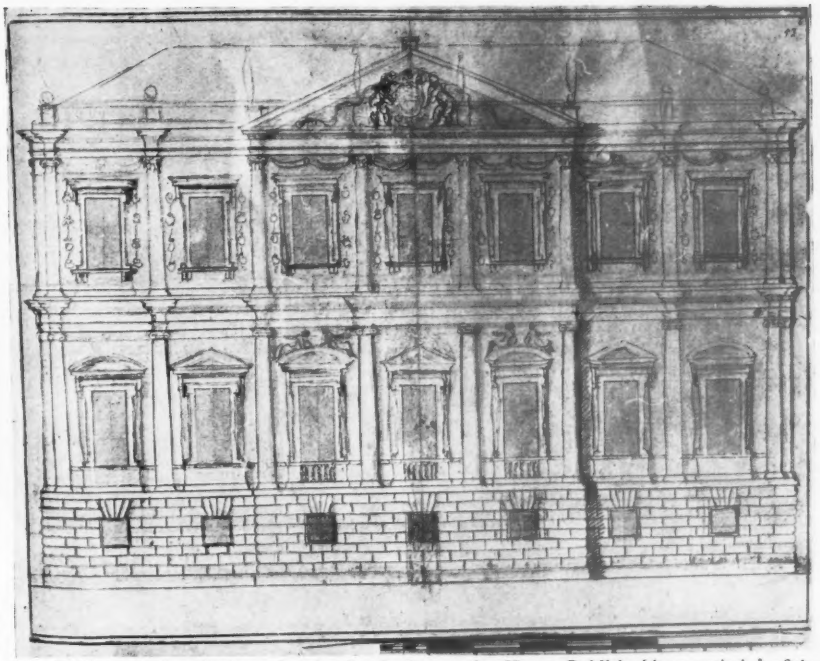


Fig. 2: The second preliminary drawing for the Banqueting House. Published by permission of the Trustees of the Chatsworth Settlement

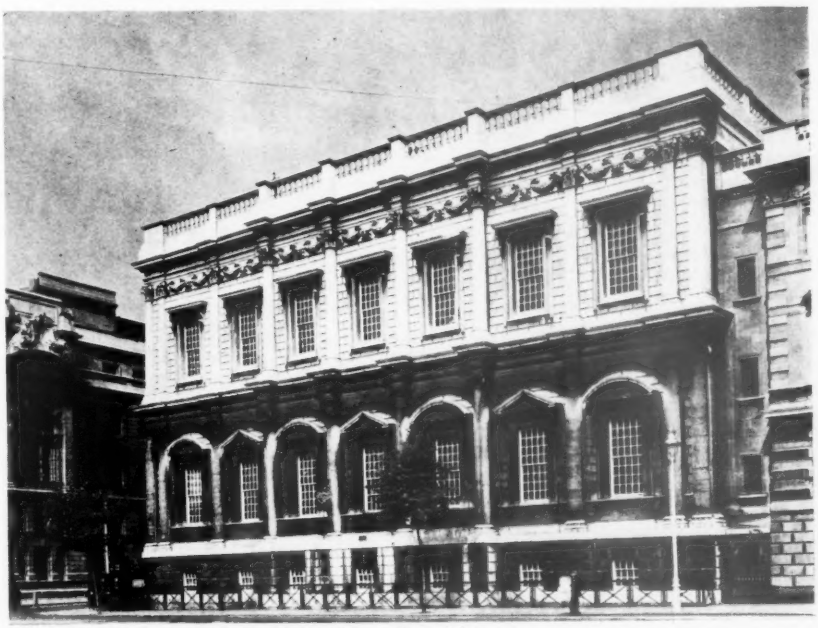


Fig. 3: The Banqueting House. Photo Crown Copyright

church façades. And lastly, in the designs for the rebuilding of Whitehall Palace(5) made during Jones's lifetime, and beyond all question embodying his ideas, there is a wide range of motives taken from non-Palladian sources. Apart from the gate-house towers in the centre of each front, which are a purely English feature, there are echoes of the back of the Farnese Palace in Rome (where a relieving arch is set in the wall over the windows), of the Great Court of the Louvre (in the breaking of the façades by centre and end pavilions, a purely French feature) and in the use of caryatids in a loggia, a borrowing either from Serlio's grotto at Fontainebleau, or more probably from the book of Philibert de l'Orme.

It can hardly be doubted, in spite of 18th century Palladians, that Jones had

Fig. 4: The coffered roof of the chapel of Marlborough House

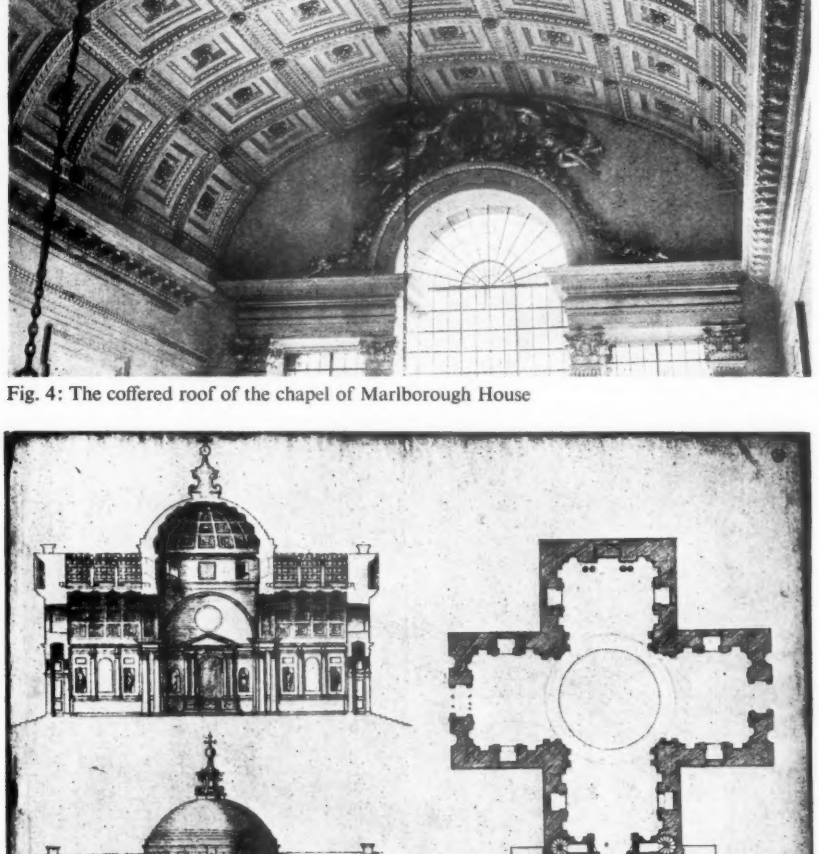


Fig. 5: Design for a vaulted church on a Greek cross plan

thrown his net very wide, and that he was intent on introducing to his countrymen whatever seemed to him the best in 16th century Continental architecture, especially where he supposed that architecture was based on the authority of the antique. That he was intoxicated by antiquity is clear from his supposition that Stonehenge was a Roman ruin—though how an intelligent man who had seen the remains of Rome itself could have arrived at this conclusion is a mystery! Moreover, it has recently been shown that Jones meant to do more than instruct by example alone, for a careful examination by Mr. Colin Rowe(*), of the great number of drawings not related to executed buildings has revealed that a treatise on architecture was in preparation, though the text may never have been written. Some of the drawings are by Jones himself, more are by his pupil, John Webb. The book was to contain chapters on the Orders and on domestic, ecclesiastical and probably urban buildings, with additional sections on gates, grottoes, fountains, etc. The majority are adaptations from known sources, generally from Serlio or Palladio, but in many cases they are developments of a theme rather than its exact imitation. And again a turning back to early 16th century ideas can often be seen, for instance in the vaulted church on a Greek cross plan (Fig. 5). Such a form is closer to the interests of Bramante than to those of Palladio.

This eclecticism, and in particular this emphasis on the clarity of design of the High Renaissance, is closely paralleled in Italian painting a generation earlier in the work of the Caracci. They, too, in an attempt to purge the later tortuosities of the Mannerists, turned back to Raphael for inspiration, though they also drew from the Venetians and from Correggio. From them sprang the more classical of Baroque painters—Guido Reni and Domenichino, and the latter was to influence the greatest classicist of the 17th century, Nicolas Poussin. This classical trend is stronger in 17th century art than is sometimes realised. In architecture it is represented by François Mansart, and to a very great extent by Bernini himself; in sculpture by Francesco Duquesnoy in Italy, by the Quellin family in the Netherlands, and by Jacques Sarrazin in France.

It is to this stream that one might expect Jones to belong. And, to a limited extent, he is linked with it. All these artists, however, worked for a fairly wide public who understood and appreciated their art. Jones worked exclusively for a small circle at the Caroline Court who, as English history was to prove, were completely out of touch with the nation as a whole. Moreover—and this is a more serious charge—all of them added something new and of their own to the ideas which they took from their predecessors. Jones, perhaps because he had no predecessors of his own race, because he was working in an idiom which was not his own and which had no roots in this country (as it had in the classical buildings then remaining in both Italy and France), was content to refine and readjust, but to add little that was new. In the Banqueting House, by which one must most fairly judge him, since it is his most important and least altered remaining building, he has produced a work of great beauty and accomplishment. But it is the swan-song of the High Renaissance, a lyric with a dying fall, the first example of that deep nostalgia for the past and for the south which was to be a recurring element in English art.

If this reading of Jones's architecture is correct, it explains much in the subsequent history of English architecture and architectural criticism. In no other country can the same dominance of High Renaissance forms be found. Jones's pupil Webb

(*) I am very grateful to Mr. Rowe for permission to refer to his unpublished thesis, *The Theoretical Drawings of Inigo Jones, their sources, and scope.* University of London, 1947.

abandoned them, it is true, for a style which differs in scale in King Charles's Block at Greenwich. But Wren at the beginning of his practice, in Trinity College Library (1676) and the exterior elevation of St. Paul's (fixed about 1675), is dominated by the recollection of Jones, and it is only in the 1680's that he begins to work his way towards a true 17th century style. Many 18th century examples, from William Kent to Sir William Chambers, spring to mind at once. And the Foreign Office is clear evidence of the 19th century reverence for the small scale architecture created by Jones. Even in detail the 19th century was prepared to be guided by him, though his usage might conflict with their greater knowledge. To Barry in his purist phase the broken entablature was anathema, since it does not appear in the Farnese façade. A study, however, of the Banqueting House led him to adopt it in his later work at the Board of Trade(7).

Moreover, it is not only in the field of design that the High Renaissance has dominated. In no other country has the term 'Renaissance architecture' been continuously applied to the entire architecture of the 17th and 18th centuries. Art historical terms are, admittedly, sometimes dangerous and controversial, but it is easy to understand the surprise, and indeed sometimes the contempt, of architectural historians used to the Continental tradition when they find both Vanbrugh and the 18th century neo-Classics discussed in works on 'English Renaissance Architecture'. It is true that new terms like 'Georgian' are coming into fashion, but the old tradition dies hard.

Architecture, however, did not fill the whole of Jones's life, and no estimate of him should be based on it alone. With the possible exception of the Earl of Arundel, he must have had a greater knowledge of Continental art than any man of his day, and in consequence was consulted by Charles I about the quality of pictures in his remarkable collection(8). He also advised Arundel on the purchase of antiques.

And a great part of his time was given to masque design. His first employment in this field was in 1606, and he was to work in it almost continuously until 1640. His masques gave him scope for a splendour of colour and general effect which was to be paralleled in his interior decoration (of which little but the great suite at Wilton House now remains). Although, as has been shown(9), much of the scenery was based on engravings (by Stefano della Bella and others) of masques given at the Florentine court, and the learned allegories of those written by Ben Jonson were also influenced by Italian sources(10), the total effect was the artist's own. Here in the brilliance of the costumes, in the elaboration of scenery which opened to reveal fresh beauties (Fig. 6), he could work with his 'immaginacy set on fire'. It is impossible for us, with our experience of complex modern stage machinery, and above all of the steady glow of electric lighting, to sense the imaginative results of Jones's use of cumbrous machines, or of the effect of torch light on his costumes. They may well have given England the same shock of novelty as the first 'bioscope' films.

Fig. 6: Masque design for Sir William Davenant's 'Temple of Love' (1635). By permission of the Trustees of the Chatsworth Settlement

The masque designs, indeed, lie at the very heart of Jones's work as an artist, and the fact that the greater number of the drawings for them are from his own hand, while most of the later architectural drawings are by his assistant, suggests how deeply he loved them. But their very essence demanded that they should 'vanish like a dream'. Something of their fragile and flickering charm can be sensed from the stage directions and the drawings, but even so, our understanding of Jones can never be complete, since we have only half his work by which we can truly judge him. The fruits of his work for the theatre, however, were to be seen in Webb's designs for the 'School of Rhodes', the first English opera, which established the tradition later to be exploited by Vanbrugh and Thornhill.

Jones's position, therefore, as the first English artist to understand fully the quality of Italian art, and to recreate it on English soil, remains and always will remain unchallenged. The prestige which his work in consequence acquired may perhaps have had a slightly stultifying effect, but it would be folly to deny that in spite of borrowings, it has in itself the quality of greatness. Indeed, at this time of his tercentenary, we may well salute him with the words of Wren:

'An architect ought to be jealous of Novelties, in which Fancy blinds the Judgment, and to think his Judge as well those that are to live five centuries after him, as those of his own Time. That which is commendable now for Novelty, will not be a new invention to Posterity, when his works are often imitated and when it is unknown which was the original; but the Glory of that which is good of itself is eternal.'(11)

(7) Rev. Alfred Barry, *Life and Works of Sir Charles Barry*, 1867, 112.
(8) R. Wittkower, 'Puritanissimo Fiero', BURL. MAG. XC, 1948, 50.
(9) C. F. Bell and P. Simpson, 'The Masque Designs of Inigo Jones', *Walpole Soc.*, XII; Allardyce Nichol, *Stuart Masques and the Renaissance Stage*, 1937.
(10) See articles by D. J. Gordon in JOURNAL OF THE WARBURG AND COURTAULD INSTITUTES, VI, 1943, 122; VIII, 1945, 107; XII, 1949, 152.

(11) *Parentalia*, 351.

Some Impressions of Industrial Enterprise in Sweden

By C. S. White [*F*]

Illustrated with sketches redrawn from the writer's notebook

MANY OF US first became closely interested in the Swedes twenty-five or thirty years ago, thanks largely to Mr. F. R. Yerbury's published and unpublished accounts of his travels. Since then many British architects have visited Sweden or become familiar with the work of Swedish architects through illustrations in British periodicals. Always we have been inspired by their architectural attainments and, in addition, impressed by their sustained reputation for graceful and generous hospitality.

Until about nine months ago, so far as I was concerned, these impressions were second hand; but in September 1951 I made a brief visit to Sweden to study various aspects of industry, including industrial relations (between management and labour), social welfare and industrial buildings. These, in my view, are interrelated, and it is hoped that the following notes may be of interest.

The visit was arranged by the Industrial Welfare Society in conjunction with the Swedish Employers' Confederation. It was extremely well organised. In rather less than a fortnight delegates visited ten industrial plants in central Sweden, and attended four conferences. There were also other opportunities for informal discussions.

The programme was a very full one. Our inspection of individual buildings often consisted of a non-stop walk during which it was only possible for me to make a few scattered notes before hurrying to catch up with the party.

Industrial Relations. When studying industrial conditions in Sweden, and comparing them with our own, it is important to bear in mind the differences between the two countries. In the first place Sweden is a comparatively large country with a small population. The total land area, i.e. excluding innumerable lakes, is a little over 158,000 square miles. The population is about 7 millions, giving a density of approximately 43 per square mile. The United Kingdom has an area of just over 95,000 square miles, a population of about 50 millions, and a density of approximately 530 per square mile.

Secondly, while Sweden has no coal she has cheap electricity (by water power), enormous forest areas and plentiful supplies of iron ore. And she has remained neutral in two wars, although, of course, her economy has been affected by both.

She has one thing at least in common with us, and that is a shortage of labour. This has been a very acute problem in Sweden for some years, and it has, quite naturally, been one of the chief factors influencing industrial relations between employer and worker, housing conditions, social services and the general standard of living. There is no doubt that wages generally and the standard of living in Sweden are higher than our own. But in some respects the cost of living is also higher, and it is questionable if the average Swedish man-in-the-street is better off than his British counterpart.

There have been strikes in Sweden since 1938, but industrial conflicts have been fewer than in America or Great Britain. This comparative industrial harmony is to a great extent due to the fact that nearly all labour-management relationships are negotiated by the established organisations, the most prominent being the Confederation of Swedish Employers (SAF), sometimes referred to as the Swedish Employers' Confederation (SEC), the Central Organisation of Salaried Employers (TCO) and the Confederation of Trade Unions of Sweden (LO).

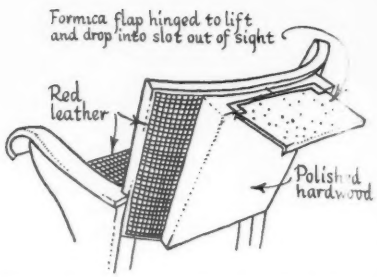
Negotiations between management and labour are facilitated and guided by a number of agreements known as the Saltsjöbaden Agreements, the first of which was signed just before the recent war. There is a sincere readiness on the part of both sides to meet and settle problems, such as those relating to occupational training, works councils, time and motion studies and so on, by amicable negotiations 'round a table'. We attended two conferences at which both sides were represented and, making allowances for the fact that the meetings were staged for our benefit, it was obvious that a co-operative spirit existed to an extent greater than is evident sometimes in this country.

Social Welfare. I am using this term to cover a very wide field, including social security, housing, recreation and working conditions. Swedish employers attach great importance to social welfare generally and allot large sums of money to it annually.

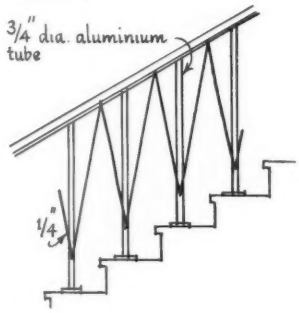
Under social security there are provisions for pensions, insurances and savings groups as in this country. Some firms also organise a voluntary scheme whereby the employees' normal recurring expenses (rent, rates, insurances, etc.) are paid regularly by the employer—an appropriate deduction being made weekly from the pay packet. This is popular with some workers.

Most firms provide living accommodation for at least some of their employees. In many cases this is on a large scale, and includes bungalows, houses and flats with varying accommodation, some for sale and some to let. There are also homes for retired and ageing employees, and hostels for apprentices who live far away. The boys are given free board and lodging for four or five years while training, and the hostels are under the charge of resident wardens, usually a middle-aged employee and his wife. In practically all the examples seen the standard of layout, design, details and furnishing was very high; sizes of rooms were, in some cases, small in comparison with English practice.

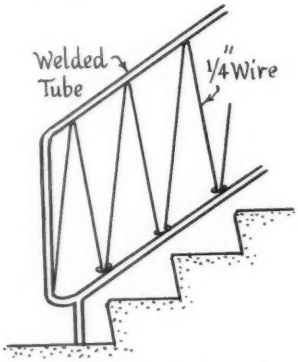
In the larger firms recreation, physical training and all kinds of sport are given



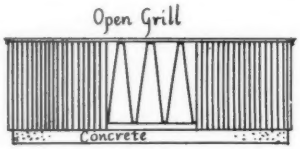
Tip-up seats in a cinema lecture hall at a chocolate factory



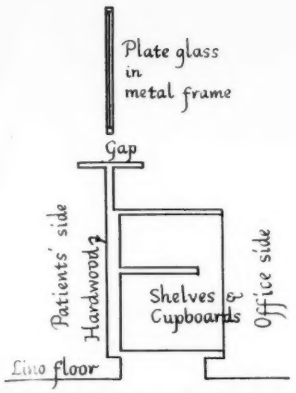
Stairs in a residential block for apprentices



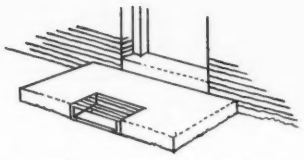
Stairs in flats for bachelor employees



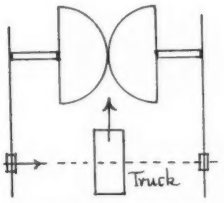
Balcony of flats for bachelor employees



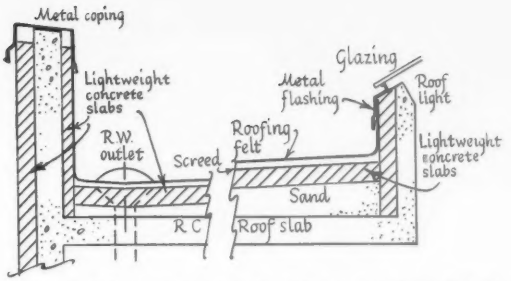
Section of waiting room desk in a factory clinic



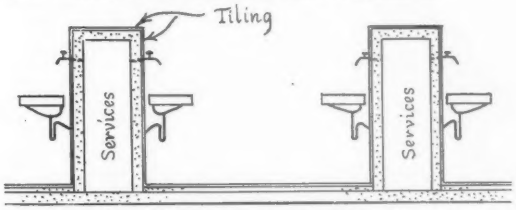
Recessed scraper with sloping slot beneath



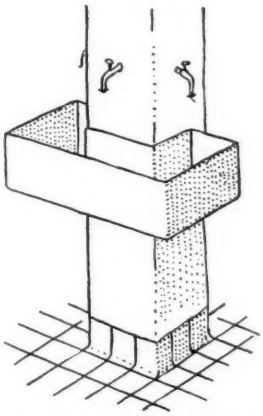
Doors operated by photo-electric cells for trucking



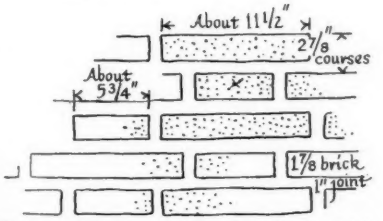
Roof detail from a booklet of architect's details published by the factory owners. Architect: Ture Wennerholm



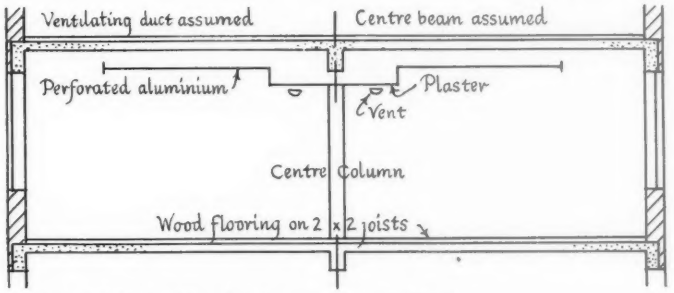
Detail in workers' washroom in a hardware factory



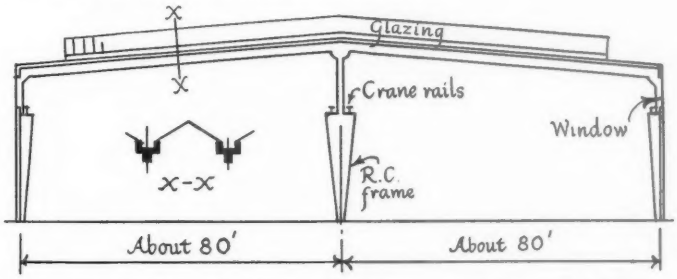
Stainless steel washing trough unit with water at controlled temperature



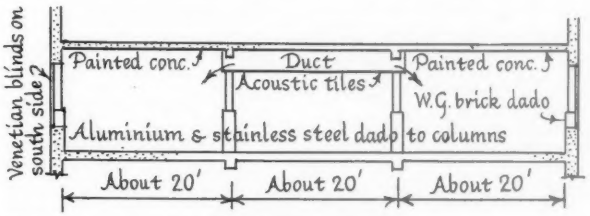
Facing bond in a laboratory block. Bricks rough brown-red



Section of light machine shop in a multi-storey block



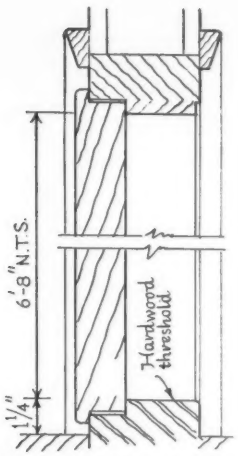
Common type of large double shop. Note steep roof glazing to shed snow



Typical shop in multi-storey chocolate factory

great attention, and provisions include athletic grounds, recreation centres with large covered courts and arenas, and in some cases impressive swimming baths. These buildings are mostly within easy reach of the factory. Holiday camps are also provided for employees and staff and their families, and are subsidised by the firm. The camps are usually remote from the factory, often many miles away on the shores of a lake, by the sea or in hills.

By 'working conditions' I mean not only factory amenities such as cloakrooms, lavatories, canteens and adequate heating and ventilation, but also training schools for apprentices, study trips abroad and similar provisions for vocational instruction. In most factories a great deal of thought, and money, has been expended on ample locker rooms, wash rooms, showers, lavatories and rest rooms. Canteens, although excellent, are not usually very large; the shift system for meals seems to be accepted in most cases. First-aid rooms and clinics are often elaborate, and



Section of hotel bedroom door

in some cases resemble miniature hospitals. There appears to be universal emphasis on cleanliness, cheerful decoration and sound deadening. All these items are most carefully studied and have been, no doubt, the subject of discussion between SEC and LO over a period of years. Swedish employers acknowledge that working conditions, and social welfare generally, are related to the nation-wide shortage of labour. At the same time it is fair to observe that the Swedes have for many years set themselves a high standard in these matters.

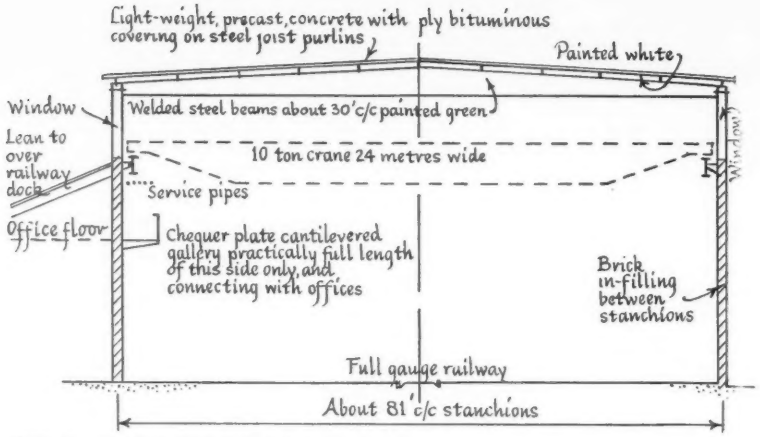
Industrial Buildings. Visits were made to industrial plants producing the following: telephonic equipment, heavy electrical equipment, locks and hardware, book binding and printing, chocolates, pottery, steel, timber and armaments.

In each case (except at the pottery works, which was a private visit), delegates were received by the management, who gave explanatory talks before conducting us round selected portions of the plant. The arrangements and hospitality in every instance were quite excellent. Bowls of red, white and blue flowers adorned the tables, alternating with the Union Jack and the Swedish flag; and, mercifully, our hosts all spoke English.

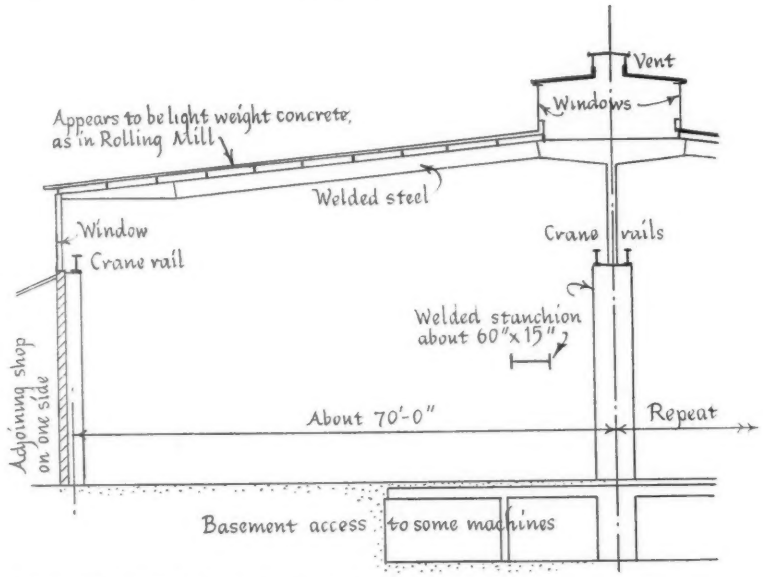
Space will only permit the inclusion of a few general notes. The plants varied enormously. Some were fortunate in having been designed and built fairly recently as a complete scheme on a vacant site; others have developed gradually over a long period, as is inescapable in many old-established industries. Some comprised multi-storey buildings in a built-up zone with little or no chance for expansion; others were spread over vast estates, necessitating bus services in the plant.

Blast furnaces and similar shops create problems of their own in any country, but otherwise we were impressed by the orderliness and cleanliness displayed and by the appropriate planning and structural forms.

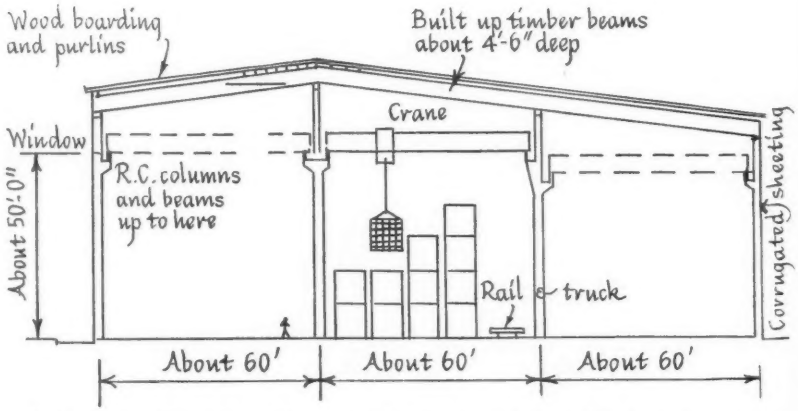
As we walked round the various buildings there was not time for more than hurried sketches. Some of these have been redrawn as illustrations to this article, but


Light-weight, precast, concrete with ply bituminous covering on steel joist purlins
Painted white
Window
Welded steel beams about 30'c/c painted green
Lean to over railway dock
10 ton crane 24 metres wide
Service pipes
Office floor
Chequer plate cantilevered gallery practically full length of this side only, and connecting with offices
Brick in-filling between stanchions
Full gauge railway
About 81' c/c stanchions

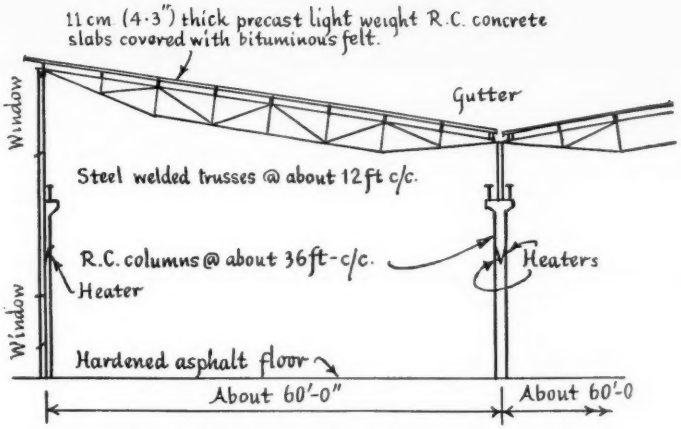
Shop in a steel rolling mill, 900 ft. long or more



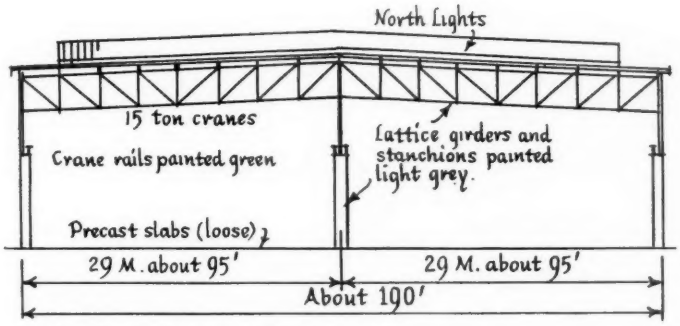
A new double shop in the steel rolling mill, 900 ft. long or more



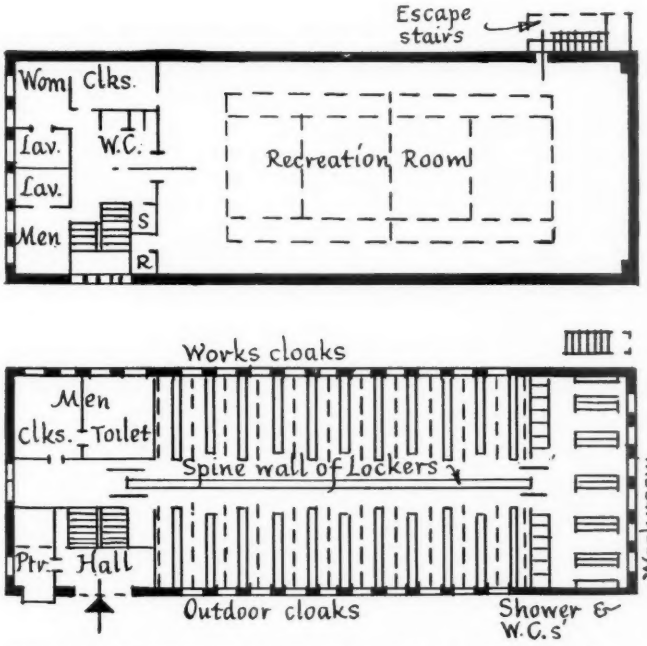
A timber sawmill warehouse about 1,500 ft. long. The whole straight line unit consisting of cooling (after kilning), grading, warehouse and dispatch is about 3,000 ft. long



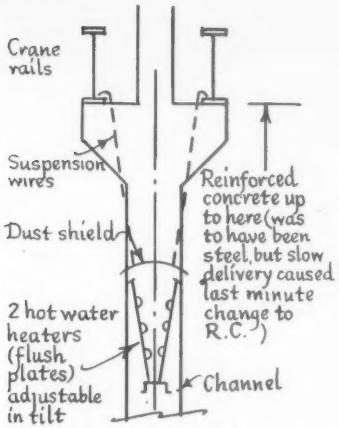
A new double shop in a steelworks, about 260 ft. long



Another shop in the same steelworks as above



Typical cloaks, washroom and recreation block in a steelworks. Clothes are hung on the open system and no thefts occur. The small square lockers in the centre are for soap, towels and other personal articles


Crane rails
Suspension wires
Reinforced concrete up to here (was to have been steel, but slow delivery caused last minute change to R.C.)
Dust shield
2 hot water heaters (flush plates) adjustable in tilt
Channel

Detail of centre column of shop on left

the reader should remember that they are no more than sketches. A few exceptions are some plans and diagrams redrawn from brochures supplied by managements; one such brochure contained a series of architect's detailed drawings illustrating the construction of the building—a thing, one imagines, very few managements would bother to produce, or even think of producing.

The following notes of construction and finishes are also made somewhat at random. They are meant principally to show the ways in which Swedish practice differs from our own.

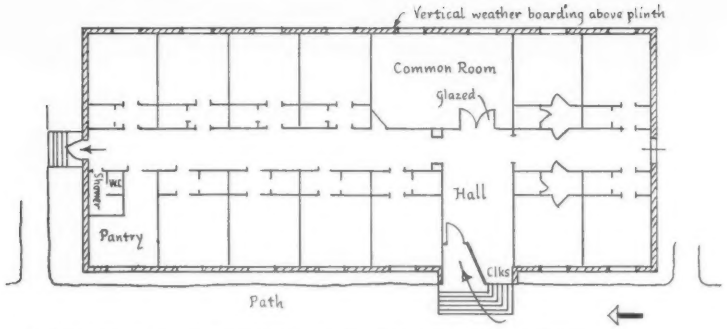
Reinforced concrete framing is used extensively, sometimes including reinforced concrete walls. Large single-storey buildings, particularly foundries and rolling mills, often consist of steel frames and trusses, with flat or sloping light-weight concrete roofs covered with bituminous sheeting and, of course, with roof glazing where necessary. Double shops are fairly common, e.g. a building approximately 1,000 ft. long and about 140 ft. wide with a centre row of columns giving two long aisles 70 ft. wide, each with its own crane but with no centre wall.

Timber is used structurally to a great extent, particularly in the saw mills, and very impressive some of them are.

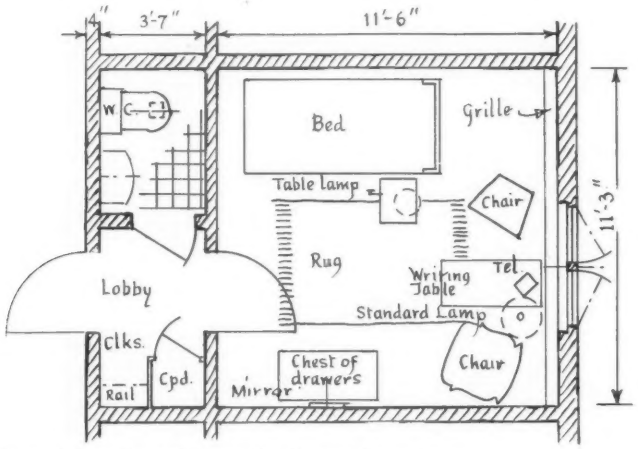
Finishings are usually of a higher standard than we can normally afford or even obtain in this country, though there are exceptions. This applies particularly to offices, canteens and kitchens, locker rooms and lavatories. As will be expected, the joinery and hardware is of first class quality, and there appears to be no shortage of stainless steel, acoustic surfaces of all kinds, marble and stone paving, hardwood floors and other delights which we remember of old.

Floor finishes—always a problem in industrial building—provided several items of interest. In heavy engineering shops the flooring varies considerably, examples being steel plates, granolithic and removable precast r.c. slabs (one metre square).

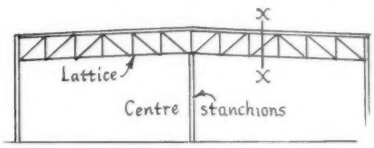
In light engineering shops the flooring is often in some form of hardened asphalt, sawdust being used around machines to



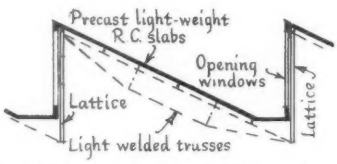
Plan of a guest house bungalow in timber at an armaments factory



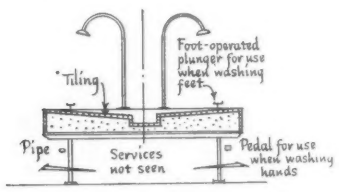
Plan of the author's bedroom in the guest house above

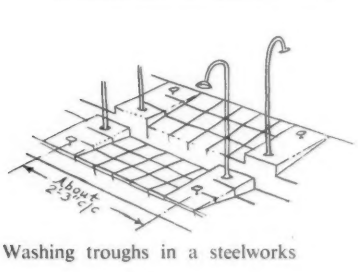


Unusual northlight construction in a steelworks



Detail section *X*—*X* of roof on left





Washing troughs in a steelworks

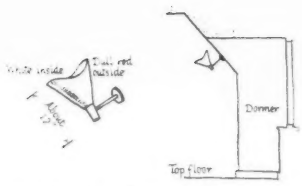
absorb oil. Gangways and stillage parks are clearly defined by white lines, and no appreciable denting of the floor surface was noticed. This type of finish is evidently satisfactory in shops of this character, and is certainly kinder to the feet than granolithic, and is reasonably easy to repair.

Other examples of flooring seen included lino or hardwood strip in canteens, clinics and offices, and tiling of various colours in kitchens, lavatories and cloakrooms. On stairs and landings of office buildings, marble, stone, brick and terrazzo are used, and of factories, granolithic and terrazzo.

In view of Sweden's climatic conditions, thermal problems are of importance, and great attention is paid to insulation generally, including the use of double windows. These windows are nearly always in timber with complicated jointing and ingenious opening mechanisms. Mechanical ventilation is more common than in this country.

Perforated acoustic tiles and similar treatments are often seen in canteens, offices and workshops; mostly on ceilings, but sometimes on walls also.

I personally learned a good deal about mechanical handling, but some ingenious



Details in a lecture room

devices new to me may possibly be well known here already. We have advanced quite a lot in this sphere during the past fifteen years and may have little to learn from Sweden.

One little building impressed me very much. It is a guest house erected by a very large firm who have a fairly constant stream of visitors from overseas. It is quite simple—just a long wooden bungalow—and consists of twelve bed-sitting rooms, charmingly furnished, each with self-contained toilet and cloak space. There is a common room and a pantry capable of serving light meals. Full service of meals is unnecessary because guests are entertained elsewhere during the day.

General Comments. For many years Swedish attainments have been admired, and sometimes imitated in other countries, including our own. I expected to be impressed and I was not disappointed.

Conditions in Sweden may be more favourable than in England: they seem to have more money to spend on good buildings, and more plentiful materials; and most Swedish industrial and other clients seem to employ competent architects as a matter of course. Whatever the reason may be, nearly all the recent building projects we saw—industrial, commercial and domestic—were clean, fresh and direct designs, obviously done by skilled architects (sometimes in collaboration with enlightened engineers) who obtained their effects by simple means. Their work appears to be appreciated by the Swedish lay public, and there is little ugliness or unseemliness in building to be seen anywhere. Special mention should be made of the many '*Konsum*' stores designed by the well-known *Kooperativa* architects' office, under the able leadership of Professor Eskil Sundahl. What fine shops they are! To quote from Mr. G. E. Kidder Smith's very fine book, *Sweden Builds*, 'The one adjective appropriate to describe Swedish architecture—if one must be employed—is CIVILIZED. It has a simplicity suggesting inevitability. Its quality is high; its standards of finish and craftsmanship are superb; its detailing is imaginative. Its overall impression lies not so much in individual greatness as in collective excellence'. Perhaps this praise is too high. I don't think it is, but I would myself just use the words 'appropriate and unaffected'.

In any case it is true to say that in our admittedly guided tour we saw little that could offend and much to admire, including shops, bridges and street furniture. If we cannot say the same of our own country it is not, I suggest, due to lack of competent architects and engineers.

A Multi-type School in Birmingham

Alex. Steele, D.A.(Edin.), [*A*].,
Architect to the Education Committee,
and J. R. Sheridan-Shedden, Dip.Arch.
(Cardiff), [*A*], Deputy Architect;
S. G. V. Milligan [*A*], Chief Assistant;
A. C. Bird [*A*]; C. T. Percival [*A*];
D. Smith, Student R.I.B.A.

This new type of school, now being erected in the rapidly developing municipal housing area of Garretts Green, Birmingham, has been planned to provide lower, middle and upper schools, but also to be capable of being recast if necessary into three separate units for grammar, modern and technical education. Therefore three separate entrances are provided, each giving direct access through foyers to assembly halls.

A considerable amount of research in planning and structure was undertaken to evolve a unit consisting of three classrooms, a combined store, a staircase, sanitary accommodation and one 960 sq. ft. general purposes room. The planning is therefore essentially vertical. The structural research was aimed at standardising steelwork at the minimum number of sections. A bay of 23 ft. 4 in. by 20 ft., based on a 3 ft. 4 in. grid, was finally selected. It is intended to use this grid on future school projects which will allow steelwork to be ordered in advance from sketch plans. The whole of the construction of the unit was then studied, details of cladding, pre-stressed concrete floors and roofs, together with all the possible prefabricated elements, being worked out.

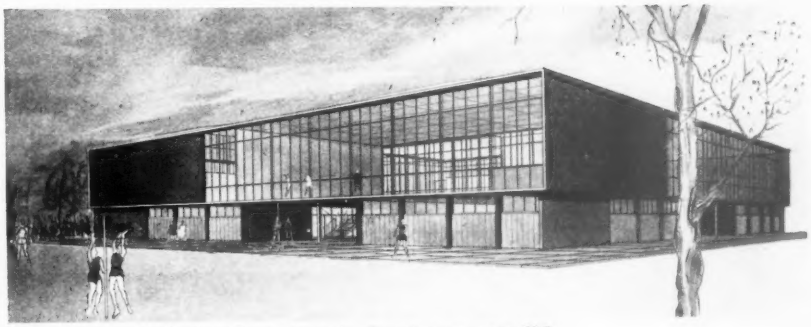
The presence of two sewers (see block plan) on the lower part of the 14.2 acre site forced the school to the upper and more irregular portion. As a result, the ground floor of the upper and middle schools connects with the first floor of the lower school. A natural depression near the north-east boundary is to be formed into an open-air theatre.

The dining accommodation has been planned in three storeys, the kitchens being on the top floor, and with lift service. The dining rooms are planned to be used as extra teaching spaces, sliding screens being provided to subdivide them. The foyer of the upper school is also used as dining space. The specialist rooms, i.e., for science, art and housecraft, have also been planned as individual units placed centrally in each school between the classroom units.

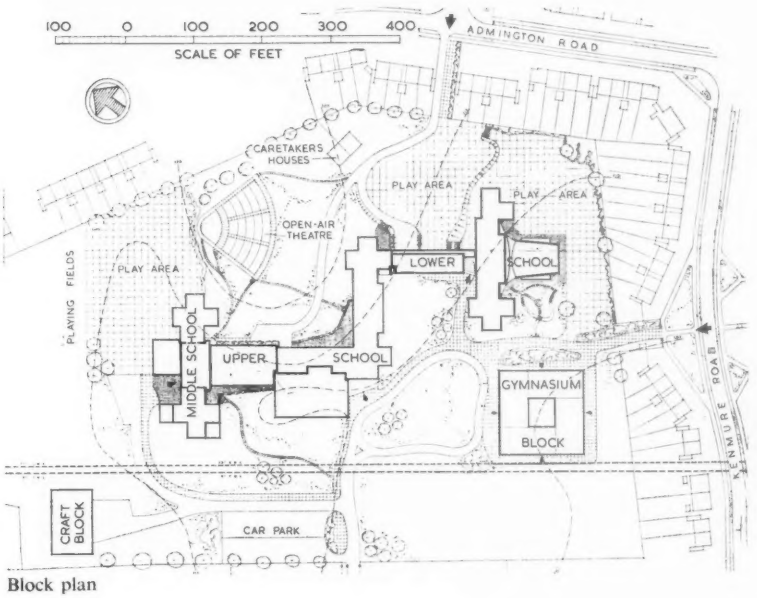
The gymnasia and craft units have been planned as separate buildings to eliminate noise nuisance. The four gymnasia compose a square block with a central court to give cross ventilation and having the groups of changing rooms on the ground floor.

The total estimated cost is £550,000.

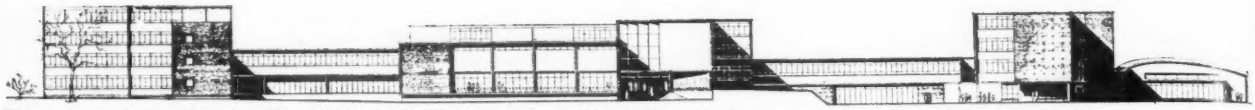
Perspective showing the lower school block and hall



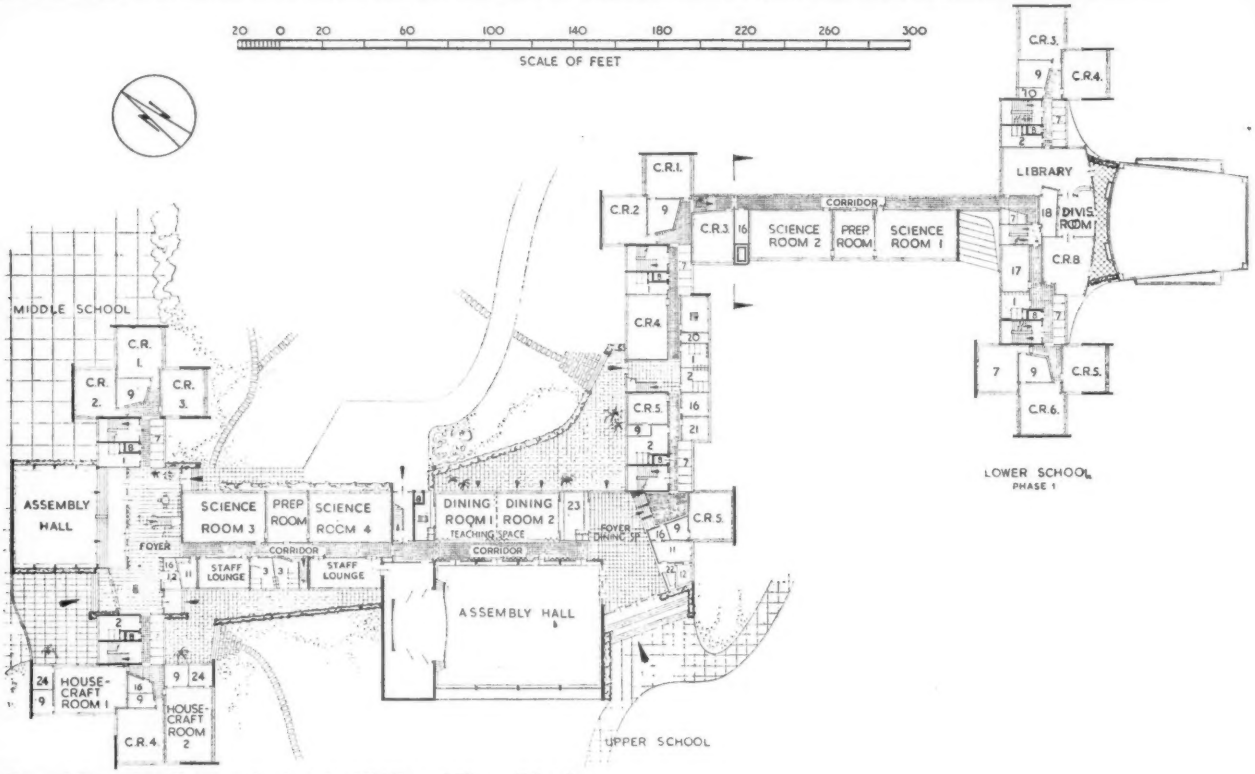
Perspective of the block of four gymnasia. See plans on page 296



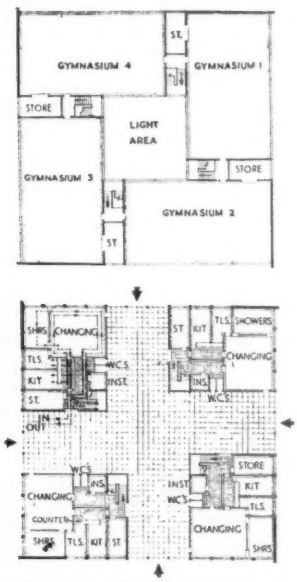
Block plan



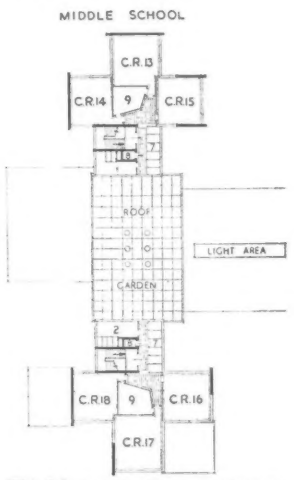
The main south-west elevation. The Middle School is on the left, the Upper School in the centre, and the Lower School on the right



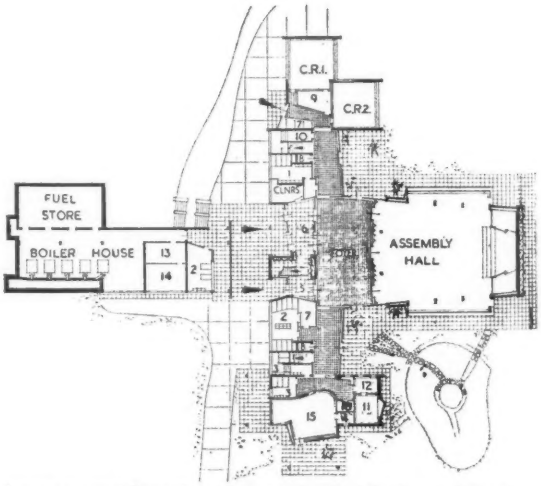
Ground floor plan. Entrance level of the Middle and Upper Schools



Plans of the detached gymnasia block. Each gymnasium can be reached from two staircases

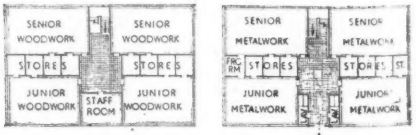


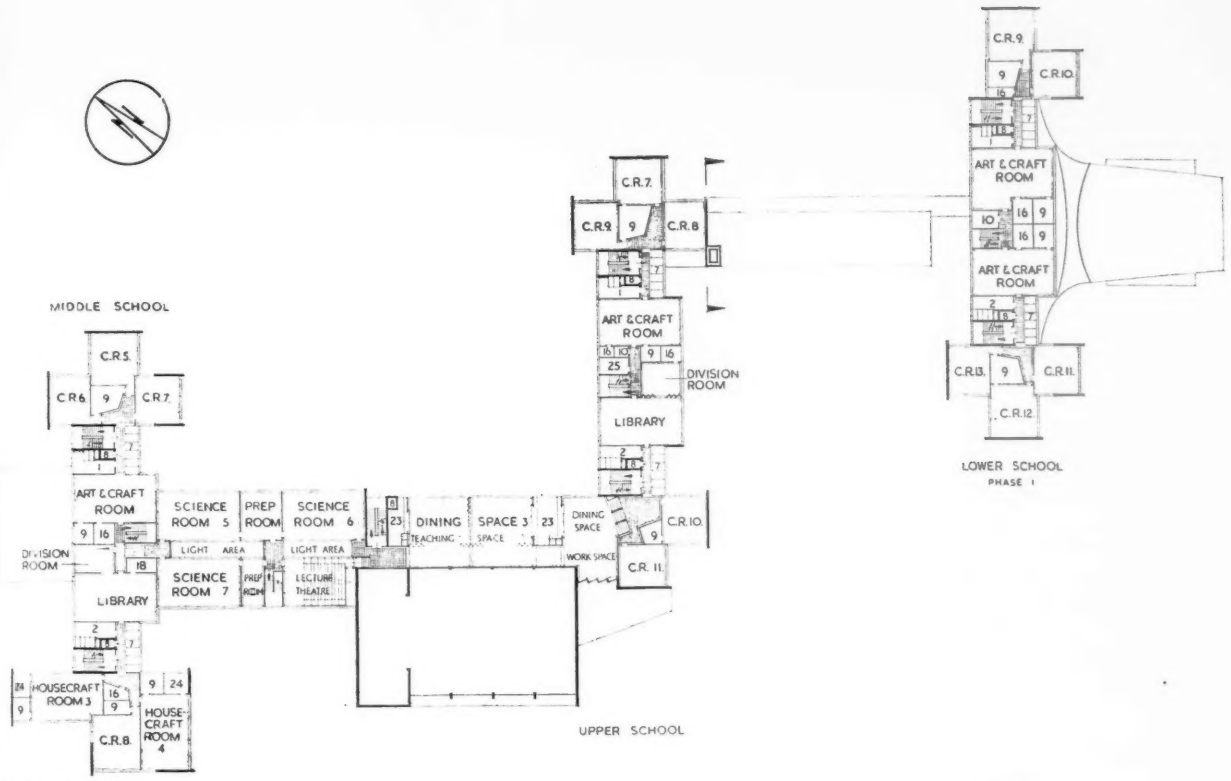
Third floor plan. Over the Middle School



Lower ground floor plan. Entrance level of the Lower School

Elevation of the gymnasia block. Right, plans of the craft block





The first floor plan

The second floor plan

Review of Construction and Materials

This section gives technical and general information. The following bodies deal with specialised branches of research and will willingly answer inquiries.
The Director, The Building Research Station, Garston, near Watford, Herts.
Telephone: Garston 2246.
The Officer-in-charge, The Building Research Station Scottish Laboratory, Thorntonhall, near Glasgow.
Telephone: Busby 1171.
The Director, The Forest Products Research Laboratory, Princes Risborough, Bucks.
Telephone: Princes Risborough 101.
The Director, The British Standards Institution, 28 *Victoria Street, Westminster, S.W.*1.
Telephone: Abbey 3333.
The Director, The Building Centre, 26 *Store Street, Tottenham Court Road, London, W.C.*1.
Telephone: Museum 5400 (10 *lines*).
The Director, The Scottish Building Centre, 425-7 *Sauchiehall Street, Glasgow,* C.2.
Telephone: Douglas 0372.

Technical Information Services. During the last two years the Ministry of Works have been developing a technical information service, with headquarters in London and officers stationed at the Ministry's regional offices in Newcastle, Leeds, Nottingham, Cambridge, Reading, Bristol, Cardiff, Birmingham, Manchester and Edinburgh. The object of the service is to make recent developments in building known, and to give advice on particular problems; further, it seeks to find out what are the practical problems of the industry and professions, so that research can be turned to them.

Last year this facility was reinforced by a special technical information service, formed by arrangement between the Ministry and the London Master Builders' Association with the object of encouraging members of the L.M.B.A. to make use of it, and to foster the feeling that they may do so by virtue of their membership. Mr. E. G. Dean [*L*], technical officer of the M.O.W., has been allocated by the Ministry to deal with this L.M.B.A. service, and since its inception he has received many and varied inquiries. It is felt that use of the service would be encouraged by the issue of technical notes based to a great extent on the inquiries. The first of these notes, recently issued by the L.M.B.A., is Bulletin No. 1, and deals with plastering; others will follow at intervals. Although intended primarily for members of the L.M.B.A., the bulletins will be available for publication in the technical press.

Bulletin No. 1 is attractively produced, and contains advice given to inquirers regarding plastering troubles, stating with commendable clarity the reasons for the defect and for the suggested remedy.

The Effect of Modern Synthetic Detergents upon Small Sewage Disposal Systems. The Science Committee of the R.I.B.A. have issued the following statement.

From a consideration of research work on the discharge of modern synthetic detergents into sewage disposal systems, it appears that some of them may prove harmful to sewage treatment. If insufficient water enters the system, certain types of these detergents are likely to have the following effects :

1. They keep in suspension solid matter which should be precipitated in the anaerobic tank, with the result that it is not broken down by the anaerobic bacteria but passes through to the filters.
2. They make considerable demands on the oxygen available in the liquid, to the detriment of the aerobic bacteria, which act in the later aeration stages of the purification process.

The experiments carried out in the course of the research show what would happen in a small plant where a sufficiently lethal concentration had been formed—the whole thing would choke up. These adverse effects, however, are only dangerous when not enough water enters the system to maintain considerable dilution.

Members designing small rural houses, which have their own sewage systems and which are not supplied with mains water, may wish to advise their clients that the extensive use of some synthetic detergents without sufficient water may cause damage to the sewage treatment processes.

The matter is treated fully in the following papers: *Further Experiments with Synthetic Detergents on Percolating Beds*, by H. H. Goldthorpe, D.Es.Sc., A.R.I.C., F.Inst.S.P., and J. Nixon, Ph.D., A.M.Inst.S.P. (JOURNAL OF THE ROYAL SANITARY INSTITUTE, February 1950, Vol. LXX.) *The Effects of Synthetic Detergents on Sewage Purification: a Summary of Current Knowledge*, by C. Lumb, B.Sc., F.R.I.C., A.M.I.Chem.E., F.Inst.S.P. (WATER AND SANITARY ENGINEER, May 1952, Vol. 3, No. 1, and June 1952, Vol. 3, No. 2.)

Delivery of Solid Fuel. In the September 1951 issue of the JOURNAL there was a note on a booklet written for the Coal Utilisation Joint Council by Mr. John Pinckheard [*A*] on 'Architectural Design Data for Solid Fuel.' An illustration showed delivery of fuel by a light mobile belt conveyor and tipping lorry. There are some situations in which a tipping lorry is not a very suitable means of delivering solid fuel,

The Charrold fuel conveyor

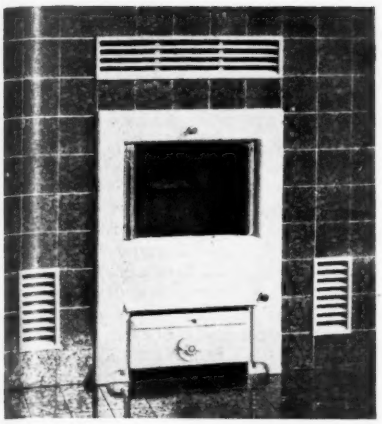
and Messrs. Charrold have now brought out a lorry which overcomes most difficulties. The body of the lorry is V-shaped, and along the bottom runs a scraper conveyor, driven by the lorry engine, that impels the fuel to the tail of the lorry. There is also a belt conveyor, known as a toter, normally carried on the side of the lorry.

On arrival at the delivery site the toter is withdrawn and is attached to a jib hoist fixed on the lorry; the end of the toter is then rested on a bracket so that fuel from the lorry will flow on to the toter. The conveyor belt on the toter is moved by a hydraulic motor connected by flexible pipes to a pump on the chassis. As the toter is supported by the jib hoist it can be swung through an angle of 180 degrees and may be raised to clear and discharge over a 7 ft. 6 in. high wall. The swinging motion allows the fuel to be stacked to a uniform height, instead of in space-wasting hummocks.

The length of the toter is 13 ft. 6 in., and at that distance it will discharge through a pavement coal plate or through an opening in a wall, or over a 7 ft. 6 in. high wall. The driver of the lorry can work the toter, so there is a saving in man-power; delivery is also cleaner as there are hardly any spillings. After the coalman has placed the toter in position—a matter of a few minutes—a load of some 6 tons can be delivered in 10 to 12 minutes. All sizes of coal and coke up to 4 in. can be handled.

The accompanying illustration shows coke being delivered through a coal plate hole. The JOURNAL attended a demonstration at which the claims made for the contrivance were confirmed. Messrs. Charrold's address is Tower House, 40 Trinity Square, London, E.C.3.

The Raymax Convector Fire. The latest model of the Raymax Fire (No. 32) was on view at the stand of Radiation, Ltd. at the B.I.F. This incorporates improvements over earlier models, notably appearance; this is shown in the illustration. The fire has the



The Raymax Fire, No. 32

following features: 10 hours' continuous burning; operating on the down-draught principle; radiant heat by means of a removable polished metal reflector; welded wrought iron or copper boiler giving hot water supply (storage cylinder 40 gal.) plus 20 to 50 sq. ft. of radiator surface (including piping) in accordance with a burning rate of 2 to 5 lb. per hour; convected air capable of heating a room of 2,000 cu. ft.; if the room is 800 cu. ft. or less convected air may be ducted to an adjacent room or two average-sized bedrooms; shaker grate with provision for dumping or turning the firegrate over; close control of burning; soot door in fireback for easy flue sweeping; will burn gas coke and hard coke, anthracite (1¼ in. to 2 in.), dry steam coal (1¾ in. to 2½ in.), household coal (1 in. to 2 in.) and manufactured fuels. Approved by the Ministry of Fuel and Power.

D.S.I.R. Annual Report. In the report of the D.S.I.R. for 1950-51 the Advisory Council refer to the delay in giving full effect to the Department's post-war plans, which included the development of existing D.S.I.R. establishments, the creation of three new ones, the growth of the industrial research associations, and additional grants for training research workers and for fundamental research at universities. The needs of rearmament, and difficulties in recruitment, have hampered the fulfilment of these plans. During the two years previous to the report the average net staff recruitment dropped to 110 a year, but the Council consider that every effort should be made to maintain it at 150 at least.

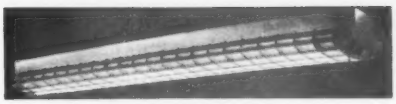
The Council's report ends by stating that a far greater use of science, in its widest sense, must be made in industry. Far-sighted men on both sides of industry realise the need for a greater use of science, but there is still too much apathy. If this country is again to be prosperous British industry must make science a real and living force in its daily life.

Even a cursory reading of the 165 pages of the summary of the work done under the D.S.I.R. will make the reader wonder how it could be done by the 3,000 members of the staff, and it is not surprising that the Department would like to raise the number to 4,000. Then there are some forty-one research associations, in which Government and industry are jointly associated as a matter of policy, grants being made to assist the associations in their work. Industry may say that there must be a time-lag in making use of this outpouring of scientific knowledge, but users will wish that it may be reduced to the shortest lag-period possible.

Wyre-Joynt. Although the method of making a joint in electrical wiring is not normally specified by architects a new invention will surely interest them, even if only in their private capacity as amateur electricians at home. The usual method of making a joint is either by a screw connector or by twisting the wires together and binding the junction with insulating tape, and neither method gives a good connection from the electrical resistance point of view. The Wyre-Joynt consists of a ceramic tube about ¾ in. long and $\frac{3}{16}$ in. outside diameter. In the middle of the tube there is a lining of solder and non-corrosive resin. To make a connection, half an inch of insulating covering is removed from the ends of the two wires to be joined and the ends are inserted into the tube so that they overlap inside. A lighted match is then held under the tube and allowed to burn out. This melts the solder and resin and makes a soldered joint in which oxidisation will not take place. After a few moments for cooling the joint will stand a pull much greater than it is ever likely to be called on to bear. The makers state that the insulation given by the tube will stand up to 1,500 volts, but that is a purposely conservative figure. This invention has only just been placed on the market and is at present available for 5, 10 and 15 amps, but extensions of its use are being developed. For temporary wiring and for making joints in old installations Wyre-Joynt should appeal to electricians, and architects may like to buy a 1*s.* 3*d.* card with six tubes on it, or a 2*s.* 6*d.* one with twelve, and try it out at home. It is a product of Messrs. Wirejoints Ltd., of 355-8 Grand Buildings, Trafalgar Square, London, W.C.2.

Lighting. In some of the fittings made for fluorescent lighting, especially those of the 'egg-crate' kind, the metal rims form a somewhat sharp brightness contrast to the illuminating panel. Messrs. Falks have introduced a fitting, called the Colne, in which the louvres are brought 'round the corner' and so give a gradual transition of surface brightness from the high values on the inner surfaces to the lower ones on the outer surfaces, and also deflect the light in a downward direction from the edges. The cut-off occurs at 26 degrees on each axis of the fitting. The material of the body is white stove-enamelled heavy-gauge sheet steel. The fitting is shown in the accompanying illustration.

Messrs. Falks have also brought out a new surface switch for A.C., called the



Messrs. Falk's Colne light fitting

'Surflush'. It is in two parts, screwed together. The back part can be mounted direct on the wall at the cable exit without the use of a block or sunk box, and it has several 'knock-out' portions for drawing the wires through to the switch portion, which is attached to the front portion of the fitting and is very compact. The fitting is 3½ in. square, and ¾ in. deep. The address of Messrs. Falk, Stadelmann and Co. Ltd. is 91, Farringdon Road, London, E.C.1; showrooms at 20-22 Mount Street, W.1.

British Standards Year Book, 1952. This edition contains a list of the British Standards current at 31 March 1952, with brief descriptions of their subject and scope, and also the membership of the General Council, the Divisional Councils, and the Industry Standards Committees. Copies may be obtained from the British Standards Institution, price 7s. 6d. net, post free.

National Building Studies.
Bulletin No. 13. *Fire endurance of timber beams and floors.* Gives description of fire tests of timber beams and floors, and notes on how to calculate the fire endurance of most typical timber floor-ceiling constructions. Obtainable from H.M.S.O., price 1s. net.

Research Paper No. 10. *An economical design of rigid steel frames for multi-storey buildings.* Describes a simple and rapid method applicable to multi-storey buildings which enables much of the economy in steel inherent in rigid frames to be realised, with design charts and examples of their use. Very technical. H.M.S.O., price 3s. 6d. net.

D.S.I.R. and Fire Offices' Committee. Fire Research Special Report No. 1. *The heating of panels by flue pipes.* Describes investigations into the temperatures attained by vertical wooden panels when placed near to unenclosed vertical flue pipes, with recommendations as to the spacings that should be maintained if the risk of fire due to radiated heat is to be avoided. H.M.S.O., price 2s. 6d. net.

MetaMica. Hydrated magnesium aluminium silicate, better known as vermiculite, has become known as an excellent material for insulating and fire-resisting purposes. Under intense heat it expands from 10 to 15 times in volume and thus becomes light in weight. Vermiculite is the basis of the product MetaMica, marketed by Messrs. MetaMica Ltd., of Oxgate Lane, London, N.W.2, who have produced bulletins describing the material, its uses and properties. When mixed with Portland cement, in recommended proportions, the material is suitable for roof and floor screeds, with an

approximate density of 22 lb. per cu. ft., and a thermal conductivity k of some 0·60 B.Th.U./sq. ft./hr./°F/in. when used as a roof screed; the respective values for floor screeding being dependent on the mix used.

Wall and ceiling finishes can be applied in different ways according to the kind of finish required, and it is claimed that the resilient nature of MetaMica enables it to bear the stresses and strains due to setting and drying with the least risk of cracking.

MetaMica blocks are made 17⅝ in. by 8⅝ in. with a range of thicknesses from 2 in. to 4¼ in. An interesting development is the use of the material to form ceiling panels; these are reinforced and provision is made for fixing devices. The standard size of the panels is 40 in. by 20 in. by 1½ in. thick, all the edges being chamfered. Their characteristics are: k, 0·85; fire resistance when used as a suspended ceiling, two-hour resistance; approximate average sound absorption coefficient (B.R.S.) 0·45; density at equilibrium moisture content, 33 lb. per cu. ft.; modulus of transverse rupture, 90-100 lb. per sq. in.

One of the most important properties of vermiculite is its resistance to fire, and for this purpose MetaMica can be used as suspended ceiling panels, prefabricated cladding sections for encasing columns and beams, or by site application of vermiculite plaster, 1 in. of gypsum-vermiculite plaster applied to both sides of a 4½-in. brick wall, or a 3-in. clinker block wall, will give a six-hour period of protection.

Vermiculite may therefore well play its part in permitting a reduction in the thickness of fire-protective covering at present required by building regulations.

Automatic Dish Washer. We are accustomed to seeing articles marked 'export only,' but it is unusual to find in an exhibition one that cannot actually be manufactured. The Aquadale fully automatic dish-washing machine was shown at the B.I.F. on the stand of W. H. Paul, Ltd., of Breaston, Derby, who told us with regret that they had to suspend manufacture of it because rearmament was preventing their obtaining a special metal used in it. This machine, which is 4 ft. wide by 2 ft. 2 in. deep and 3 ft. 8 in. high, will take approximately 48 pieces of crockery and 100 pieces of cutlery. The term 'fully automatic' is no over-statement. Connections to the machine are a cold water feed, a drain outlet and an electrical lead. After the crockery is in place and the lid shut one presses a button; thereafter the machine washes and sterilises the crockery at a temperature of 200 degrees F., lets out the dirty water, lets in a new lot of somewhat cooler water and rinses the crockery; then it lets out the second lot of water and leaves the crockery to dry by its own heat. When an indicator light goes out one can open the lid and remove the clean crockery, dry and ready for re-use. The time taken is 10 minutes and the cost one penny per wash.

The appliance incorporates an electrically-heated water heater fully lagged which can, if desired, be connected to an existing hot water supply, in which case the heater acts as a booster. The washing is done by revolving spinners spraying water under pressure and operating by jet reaction. This housewife's dream costs (or will cost) about £200, a figure which puts it beyond the reach of almost all housewives, but not of café and canteen owners, who have to pay for labour and breakages in washing-up.

British Standards recently Published. B.S. 459. Part 3: 1951. *Fire-check flush doors and wood and metal frames.* This Standard is a revision of B.S. 459 of 1946, which dealt only with flush doors of half-hour fire resistance. The new Standard includes the one-hour type also. As the fire performance of the doors is dependent on the use of suitable frames, details of these are included, for wood and metal. Not every type of door which will fulfil fire-check requirements is covered, but the doors described can be produced under modern conditions with the assurance that they will provide the necessary protection. Drawings show the construction for the half-hour and one-hour types, and the minimum dimensions of wood and metal frames. Price 2*s.* net, post free.

Codes of Practice recently published. CP.303 (1952). *Surface water and subsoil drainage.* Contents: methods of collection and disposal of rainwater from roofs, paved areas, etc., and of ground or subsoil water, limited to sewers and drains such as would be required for small housing schemes, schools, factories and individual properties. Design considerations—rainfall and run-off, permeability of surfaces, size and gradients of pipes; systems of disposal; subsoil drainage, spacing of subsidiary drains. This Code can be obtained from the British Standards Institution, price 2*s.*

Practice Notes

Edited by Charles Woodward [*A*]

IN PARLIAMENT. Hospital Regional Boards. (Technical Staff.) Asked the total salaries and allowances paid annually to the architects and their technical and administrative assistants employed by the regional hospital boards, the Minister of Health replied: The total salaries and allowances paid during the financial year 1951-52 amounted to £204,527. (23 May 1952.)

Development Charges. Asked whether, in the light of the progress made on the assessment of claims on the sum of £300 million set aside under the Town and Country Planning Act 1947, he would make a statement about the future of development charges from persons who possess agreed claims, the Chancellor of the Exchequer replied: Yes. In future when a development charge becomes due from a developer who possesses a claim the value of which has been determined, the Central Land Board will accept a charge upon that claim as security for an amount not exceeding 80 per cent of the face value of the claim. Only the balance (if any) of the development charge will be immediately payable. (26 May 1952.)

Building Costs (Daywork Charges). Asked, in view of the fact that the agreement between the British Surveyors' Association and the Federation of Master Builders constituting a national schedule of daywork charges needlessly increases the cost of housebuilding and repairs by some 40 per cent, what action he proposed to take to bring the schedule to an end and to substitute for it one more equitable to the community as a whole, the Parliamentary Secretary to the Ministry of Housing and Local Government replied: Daywork rates are not used for house building, and would be used for repairs only when no other method of charging is practicable. In any event my right hon. Friend has no authority in the matter. (27 May 1952.)

Private Builders (New Streets Act). Asked whether he was aware of the difficulties facing private builders on account of the requirement of the New Streets Act 1951 to deposit with the council concerned a sum of money against the estimated cost of adequate road construction, and whether he will assist the firms concerned to meet this obligation, the Parliamentary Secretary to the Ministry of Housing and Local Government replied: My right hon. Friend is aware of the obligations imposed by the Act. He is looking into the problem of how they may be met in the least onerous way. (27 May 1952.)

ROYAL INSTITUTION OF CHARTERED SURVEYORS. The following note appears in the issue of the R.I.C.S. JOURNAL for May.

'The first sentence of the R.I.C.S. scale of charges for quantity surveying services reads: "The Scale of Charges for the preparation of bills of quantities set out in 1 (*a*) below is an overall scale, *based on the inclusion of all provisional amounts which do not normally call for measurement.*"

'It appears that doubts have arisen as to the meaning of the words in italics. The Quantity Surveyors Committee wishes, therefore, to point out that these words mean, and have always meant, that the figure on which the fee percentage is to be calculated includes all provisional amounts, whether or not they call for measurement.'

Electric Work. Daywork Charges. A new schedule of daywork charges for electrical work executed on daywork in conjunction with and during the progress of work under a lump sum contract has been agreed between the Royal Institution and the National Federated Electrical Association.

It supersedes the present agreed schedule and will apply to work done under contracts entered into on or after 1 May 1952. Copies of the new schedule are obtainable from the Royal Institution, price 3*d*. each.

MINISTRY OF WORKS. The Ministry have published Advisory Leaflet No. 25, which deals with Painting Woodwork. It is obtainable at H.M. Stationery Office, price 3*d*.

BUILDING CONTRACTS. Payment of Accounts. Representatives of associations connected with the building industry met recently in London to consider steps to overcome the problem of financial difficulties resulting from local government payment methods. The following associations were represented at the meeting: Federation of Master Builders, National Federation of Roofing Contractors, Federation of Associations of Specialists and Sub-Contractors, National Council of Building Material Producers, Building Industry Distributors, Federation of Painting Contractors and the National Federation of Plumbers and Domestic Engineers. Representatives of the Institution of Municipal Engineers were also present by invitation.

A press notice issued after the meeting said that the problem of finance is one which is having effect upon all types of building construction and repair work, but is most acute in connection with work undertaken on behalf of Government Departments, nationalised industries and local authorities, and that the most serious difficulties arise in regard to house building for local authorities. The press notice went on as follows:

'Views expressed at the meeting showed that there were avoidable delays in payment by some local authorities to the builders contracting for them. It is essential for the building industry to have speedy payment in both the interim and final stages, as the Ministry of Housing and Local Government requires speedy completion of houses. Financing of the building industry is certainly a most important aspect of the housing problem today. It is inevitable that where previous experience has proved that payments are unduly delayed, those tendering for local authority work will be forced to consider this aspect in quoting prices. This means dearer houses. Prompt payment means the free flow of materials to the site. Prompt payment qualifies for monthly discount, which should reflect in lower prices. These financial aspects of the problem and their effect on the speedier completion of houses should be brought home in the strongest possible manner to the Government, local councils and, especially, to the ratepayers.

'There was general agreement that if the recommendations contained in Circular No. 42/52 recently issued by the Ministry of Housing and Local Government were fully implemented, these would go a long way in achieving the purpose desired. These included recommendations to local authorities to use the standard form of contract without amendment, to take adequate steps to ensure payment being made within the time stipulated in the contract, to avoid alteration in design and equipment of houses during the progress of the work, and to take steps to reduce the total amount of money withheld from the contractor under retention clauses.

'Much will depend now upon the extent to which all local authorities will follow the advice given by the Ministry. The Standing Orders of many local councils may be an impediment to the prompt adoption of certain of the recommendations, but no time should be lost in revising these in order that the housing surveyors may have reasonable freedom to act.

'Government departments and nationalised industries will find that in principle the present recommendations of the Ministry in regard to Housing Contracts have useful application in other fields of building construction.'

The statement concluded by saying that if productivity is to be maintained or increased and continuity of work assured for the essential building labour force, all impediments to the settlement of accounts in proper time must be removed.

LAW CASE. A. Smith and Son (Bognor Regis), Ltd. v. Walker. Court of Appeal 24, 25 March 1952. Allocation of payments to licensed work. Regulation 56A.

By an agreement dated 20 April 1948 the plaintiffs, a firm of building contractors, agreed to carry out certain demolition and building works on the defendant's house. Before a building licence, as required by Regulation 56A, had been obtained, the plaintiffs pulled down a wall of the house and rebuilt it, and on 23 April and 11 June 1948 the defendant paid to the plaintiffs two sums of £500. On 11 and 30 June 1948 the plaintiffs obtained licences in respect of work on the rest of the house authorising an expenditure of £3,200. The cost of the unlicensed work amounted to some £1,700. In a claim by the plaintiffs for the balance of the payments in respect of the work carried out, the Court of Appeal held that the payments by the defendant should be allocated in respect of the sums which the plaintiffs could lawfully claim, and, therefore, should be allocated to the licensed work. (All England Law Reports, 1952, Vol. 1, Part 18, p. 1008.)

The Court said that the payment of £1,000 (i.e., the two sums of £500) must be treated as a payment under the contract as a whole and must therefore be allocated to the defendant's credit in respect of such sum as the plaintiffs could *lawfully* claim, i.e., £3,200. The defendant therefore got the benefit of the £1,000 in diminution of his debt for the *lawful* work and did not have to pay for the *unlawful* work.

It would appear from the judgments in the case that nothing less than a specific allocation of payments by the defendant to the unlawful work would suffice to enable the plaintiffs to succeed and that the plaintiffs could not themselves allocate, as they had sought to do in the case.

The Court supposed a case where all the work done was unlicensed and part payments have been made. In such a case the builder cannot successfully claim the balance due to him and the owner cannot recover any payments that he has made. Both were parties to an illegal transaction and the law will not give its help to either of them.

Where one part of the work is unlicensed and the other part is licensed then the Court thought it was plain that any payments made by the owner generally on account must be allocated to the lawful part of it. It is not permissible for the builder to appropriate them to the unlawful part, but, if the owner himself specifically appropriates a particular payment to the unlawful part, then it remains where it is. He cannot turn round afterwards and appropriate it to the lawful part. Just as the builder cannot recover the balance due to him for the unlawful part, so also the owner cannot recover back any payments he has made specifically on account of it. He cannot do it directly by action, nor can he do it indirectly by altering his appropriation from the unlawful to the lawful part.

(*Note.* In Dennis and Co., Ltd. v. Munn it was held that in no case can the amount of any part of the free limit be added to the amount of the licence in one and the same operation. It would appear that the work covered by a licence and the work done under the free limit must be completely severable. JOURNAL, April 1949, p. 285.)

MINISTRY OF FUEL AND POWER. The Minister of Fuel and Power gave the House of Commons on 29 May details of the experimental government loan scheme to encourage the installation of industrial fuel saving equipment. The scheme, which will be operated as an experiment, applies in approved cases to industrial firms able to save substantial amounts of fuel by installing any of a number of specified fuel saving devices. These devices are (*a*) back pressure engines and turbines, (*b*) waste heat boilers, (*c*) feed water economisers, (*d*) air preheaters, (*e*) heat exchangers, (*f*) structural insulation of single sheeted factory roofs and walls.

The total amount available for loans will not exceed £1,000,000 and loans to individual firms will not exceed £25,000. Commercial rates of interest will be charged. Applications will be dealt with in order of the dates of receipt.

If a loan is granted under the scheme it will still be necessary for the firm concerned to obtain any necessary licences, etc., which may be required before the work can be carried out.

An explanatory leaflet giving full details and an application form may be obtained from the Fuel Efficiency Branch, Ministry of Fuel and Power, Queen Anne's Chambers, Dean Farrar Street, London, S.W.1. (P.R. 1377. MFP/FE/190.)

Architects' Benevolent Society

Annual General Meeting 7 May 1952

IN THE ABSENCE of the President, Mr. A. Graham Henderson, in America, Sir Banister Fletcher, Vice-President, took the Chair at the Annual General Meeting of the Architects' Benevolent Society on 7 May 1952.

The President of the Royal Institute of British Architects was elected President of the Society. Mr. H. S. Goodhart-Rendel was re-elected Honorary Treasurer, and Mr. Charles Woodward was re-elected Honorary Secretary. Mr. Digby L. Solomon was elected a Vice-President, and the following Vice-Presidents were re-elected: Sir Harry Vanderpant, Sir Banister Fletcher, Mr. H. S. Goodhart-Rendel, Mr. W. H. Ansell and Sir Lancelot Keay.

Sir Banister Fletcher, in moving the adoption of the Annual Report, Statement of Accounts and Balance Sheet, paid tribute to the late Mr. Greville Montgomery and Mr. Hugh Montgomery, and referred to his long association with the family since Mr. Greville Montgomery and his brother took over the Building Exhibition in 1895. He said that the Society owed a tremendous debt of gratitude to the Montgomerys, and he hoped that the happy association with the family would continue through Mrs. Montgomery and her son.

Mr. H. S. Goodhart-Rendel, Honorary Treasurer, in presenting the Accounts and Balance Sheet, said that the Society's financial position was fairly satisfactory, but the total of regular contributors was little more than two thousand, which was bad considering the size of the profession—over seventeen thousand on the Register. The Council was not content with the scale on which its grants were made, but until it got more support that scale could not be increased.

The Centenary Fund had now reached over £9,000, which was not nearly enough for the purpose, but the Committee was looking for a suitable site for the homes, and appeals for more contributions would continue to be made. The Leonard Solomon Memorial Fund, which continued to increase through the generosity of Mr. Digby Solomon, was used for the education and maintenance of the children of architects, and contributions to this fund would be welcomed from anyone who felt interested in that part of the Society's work.

By the energy of some of the Allied Societies, very welcome extra funds had been raised; in one area a personal appeal by the Society's local representative had resulted in £66 extra contributions in a very short time. Other Societies had organised dances or prize draws for the benefit of the Society. He hoped that all these efforts would continue and increase: the Council was most grateful for them.

Mr. Charles Woodward, Honorary Secretary, in presenting the Report, said that the Society's grants had helped applicants of varying circumstances, from an architect's widow of over 90 years of age to a young man temporarily unable to work through illness, who needed help to maintain his wife and small boy. The Council was very grateful to all who contributed to make this help possible, and also to the various technical journals which so kindly had given publicity to the Society's activities.

The object of the Centenary Fund was to build homes for elderly beneficiaries, but the Society could not hold land or property until it was incorporated. The Draft Memorandum and Articles of Association which were before the meeting had been drawn up by the Society's Honorary Solicitor, Mr. Sydney Redfern, and if these were approved by the meeting the necessary steps could be taken for the Incorporation of the Society.

The Draft Memorandum and Articles of Association were approved by the meeting for submission to the appropriate authorities to proceed with the Incorporation of the Society.

Book Reviews

The Modern Factory, by *Edward D. Mills.* 9¼ in. by 7¼ in. 190 pp. incl. pp. of illus. text illus. Archl. Press. 1951. £1 10*s.*

In this industrial economy of ours, where we are told daily that we must produce or starve, Edward Mills' admirable new book is most aptly timed. It presents a well-balanced survey of the problems faced by the architect in his task of making factory buildings as efficient as the machines they house, and indicates to the industrialist how the architect can help him resolve difficulties which have so often been accepted as necessary evils. This is surely the field where the architect can and must exercise his special skill as planner and co-ordinator.

Functional architecture has long suffered the handicap of structures which outlive their efficiency, whilst the popular remedy of the cheap 'standard' factory possesses the disadvantage of mass-produced tailoring in trying to fit everyone and fitting no one really well. This book deals in very readable and informative fashion with the problems of careful location, site-planning and initial research, which must be faced if the factory is to be capable of healthy, orderly growth and have the necessary flexibility to profit from changing techniques.

Carefully-framed check lists and diagrams are given, which will materially assist both architect and client in arriving at a complete briefing. A wealth of data is provided on the numerous technical aspects of design, such as ventilation, heating, lighting, noise abatement, colour and general structural methods and, where these specialist studies are too extensive to be covered in detail, useful guides are given to the sources of further information. The relationship of production flow to planning and the layout of the various ancillary buildings are fully discussed, whilst emphasis is added to the concluding plea for the maintenance of architectural values by well-chosen illustrations of contemporary examples. The book is likely to become a valued work of reference.

ERNEST SEEL [*A*]

Escape from Fire, methods and requirements, by *B. G. Phillips.* 8½ in. 160 incl. xii pp. + front. + 18 pls. Spon. 1951. 16*s.*

The title of this book is a little misleading. It suggests that this is an omnibus treatise, whereas its field is restricted to the influence of existing Acts of Parliament and building regulations in this country. The author does not appear to have studied practice in other countries, some of which is valuable, notably that of the United States, nor does he lay down general principles.

There has long been needed an authoritative treatise on the subject. Admittedly, such a book would be difficult to write, because there is no basic research to serve as a foundation. Practice is governed almost entirely by expert opinion—and experts notoriously differ—which in turn has been derived from collective study of catastrophes. The whole matter is in fact purely empirical. This derived experience is the sole basis for the varied—and 'varied' is the word—regulations which govern means of escape in this and other countries.

Within his limited field the author does well enough, if a little discursively. He gives full analyses of and data on the principal Acts, though these are interspersed with his own ideas on what constitutes 'good practice'. The book is useful to the architect who wishes to know what the factory inspector or a local authority will or will not accept, always remembering that each of the latter is liable to be a law unto itself.

The author claims that his book is complementary to Part iii, *Means of Escape,* of *Post-War Building Studies* No. 20, though this Part has not yet been published. This report, which may have been published by the time this review appears, is likely to provide agreed expert knowledge for this country covering the whole subject. It is understood, however, that the report will deal with new buildings only and also will be purely advisory and therefore open to authorities to adopt or not as they wish. Meanwhile those architects who are concerned with day-to-day problems of escape may find this book useful. E. L. B.

Perspective Drawing, freehand and mechanical, by *Joseph William Hull*. 8½ in. by 11 in. xviii + 137 pp. text illus. Berkeley and Los Angeles: Univ. of California Press; Lond.: Cambridge U.P. 1950. 19*s*.
This treatise is of especial interest inasmuch as the author adopts the unusual but highly satisfying procedure of presenting the general appearance of pictures drawn in perspective *before* there is any detailed attempt to develop the geometrical theory relating to the subject.

The great advantage of the method is that the type of student who might easily be repelled by the strictly mathematical approach (which, after all, in this instance is only a means to an end) has his interest immediately stimulated by a pictorial display of a miscellaneous kind, including not only architectural themes but landscape and figure drawing.

The examples chosen to illustrate the author's points have a wide range. For instance, the reader is encouraged to appreciate the element of perspective present in various degrees in a wall painting of the T'ang Dynasty (early 9th century), a figure by Andrea Mantegna entitled 'The Dead Christ', a Van Gogh drawing of a street, a pencil sketch by Matisse, a portrait by Ingres, an 'interior' by Pieter Brueghel the Elder, and so on. The selection has no regard for chronology, yet it is based on logic and, moreover, has considerable practical value, as it embraces subjects both large and small—studies of plant and animal life and of industrial design. In fact, the aim of the book is to help an all-round illustrator to master that part of his craft which relates to perspective.

The geometrical and specifically architectural section, which is relegated to the second half of the treatise, is developed in a masterly manner and, starting from elementary beginnings, the student is shown how to tackle successfully complicated problems of perspective drawing. A number of the illustrations are by S. Macdonald Wright, Professor of Fine Arts at the University of California, Los Angeles, and by modern American architects of repute. This book is a valuable addition to the R.I.B.A. Library.

A. TRYSTAN EDWARDS *[F]*

The Architecture of the South-West, Indian, Spanish, American, by *Trent E. Sanford*. 9¼ in. xiii + 312 pp. + 64 pls. text maps. New York: W. W. Norton; London: George Allen and Unwin. 1950. £2 2*s*.
When the outposts of the Hispano-Mexican empire fell to the Americans in 1846, the only remains of a vast colonial enterprise were the Franciscan missions, already languishing under dissolution. But the region brought a rich historical and architectural heritage. The great period (1050-1300) of building by cliff dwellers in the 'four corners', where the states of Utah, Colorado, Arizona and New Mexico meet, was succeeded in the early 16th century by waves of Spanish exploration and colonisation; military expeditions in search of gold gave place to civil and religious government which fostered agriculture and crafts. The Franciscan fathers in particular were responsible for the building of churches and plantations. They spread through New Mexico during the 17th century, only to have their work almost totally destroyed by an Indian uprising of 1680. Texas and Arizona were the next to come within their sphere, and finally, in California during the 18th century, Father Junipero Serra established a string of missions from San Diego to San Francisco, each one day's journey from the other. To the central theme of the building of the missions the author adds a limited consideration of 'Mission' as a revival style, and its development since the south-west became a part of the United States.

Among the appendices are a chronological summary concerning the exploration and colonisation of the area, and a table giving the location, founding date, description and history of all the missions. These tables, together with the author's obvious fascination by social history—a prejudice which restricts architectural criticism to the barest description of monuments—indicates that the book was written as a guide for the traveller casually interested in architectural history. However, not even a limited bibliography is included (such remarkable structures as the early stone churches of New Mexico compel further consideration), and the book's size and weight prevent its being carried conveniently in a pocket. At best, Mr. Sanford has written an appreciation of south-western history and architecture for the layman.

R. W. DUEMLING,
Yale University.

The Unsophisticated Arts, drawn and described by *Barbara Jones*. 9¼ in. by 7 in. 192 pp. incl. pls. text illus. Architl. Press. 1951. £2 5*s*.
This book is bound to be of widespread interest. It evokes memories both serious and amusing of everyday things recently familiar to all, but now half forgotten by many people.

Although the 'unsophisticated art' with which Miss Jones deals emerged in the 19th century and was developed in the 20th, it is by its nature much less permanent than much of the vernacular art of earlier generations and the more likely to be quickly forgotten. It is not 'folk art' likely to be preserved artificially by self-conscious societies, and one is grateful therefore to the author for a valuable record that will grow ever more fascinating with the passing of the years.

The book covers a wide field; it deals not only with piers and pavilions, kiosks, barges, round-abouts, waxworks, dolls and automatic toys, but also with the application of art to taxidermy, tattooing, table decoration and numerous other occupations to which the artistic fancy could contribute. There are thirteen chapters, each of which deals with common objects or features of the Victorian and Edwardian scene and shows how 'artistic' decoration was used to meet the demands of popular taste. The authors themselves were unconscious artists, men of ingenuity and imagination rather than æsthetic sensibility, whose concern was often not to beautify so much as to shock, amuse or impress.

Miss Jones points out in her preface that 'for a long time after the industrial revolution the design of many mass-produced objects followed traditional lines' and a feature of much of the art illustrated is its obsession with obsolete traditions. But the creative impulse had not yet been coddled out by the 'inevitable spoon feeding of a mechanised system', and one is struck by the individuality of the work and the lack of any coherent principles of design. It is 'consumer-inspired' art, resulting in a wealth of amusing and frivolous achievements, and it is strangely interesting by comparison with much of the sombre design of today, with its lack of fantasy.

The historical events of recent years and the growth of scientific knowledge have had surprisingly little effect on certain of the features, for instance the tombstones and the table decorations which are still familiar. Here the 'unsophisticated' tradition still lingers, but it is generally giving way to the machine-made utilitarian product.

The story is well told in the illustrations, which are excellently chosen, and Miss Jones' own brilliant drawings contribute much to the reader's delight.

ELIDIR DAVIES *[F]*

Moholy-Nagy. Experiment in Totality, by *Sibyl Moholy-Nagy*. 9¼ in. xi + 253 pp. text illus. New York: Harper. [1950.] $6.50.
Moholy-Nagy's life embodies the extraordinary paradox presented by the avant-garde movement, and particularly by the Bauhaus in the 1920s and early 30s: the dream of integration of the visual arts into the world of the machine. He was an amateur at heart, he 'dabbled' (most competently) in painting and typography, photography and documentary films, abstract sculpture and stage design, packaging, industrial design and exhibition architecture. In spite of the diversity of the media, he was an able practitioner of them all—an original inventor of shapes and space, but always fascinated by the 'machine' and by the impersonal production process of the 'new' techniques. Most revealing in this respect is the story, in the book under review, of the picture painted by telephone: '. . . He had to prove to himself the supra-individualism of the constructivist concept, the existence of objective visual values, independent of the artist's inspiration and his specific *peinture*. He dictated his painting to the foreman of a sign factory, using a colour chart and an order blank of graph paper. . . .' And so this esoteric individualist thought it possible to detach himself from his own personality even in this personal and intimate creation: painting. This was in 1922.

His photographs and photograms are superb, but he was greatest as a teacher and inspirer. In 1923 Moholy became head

of the metal workshop and the Advanced Foundation Course of the Bauhaus, which he took over from Paul Klee. For ten years he taught, inspired and stimulated at the Bauhaus; besides that he painted, made stage sets and documentary films. Then everything collapsed with Hitler. He went to Holland first and then to England. Some of us remember vividly his exhibition at the London Gallery in 1937, and his posters for the London Passenger Transport Board. The excellent window display at Simpsons in Piccadilly, even today sixteen years later, witnesses to the influence of his London stay. For architects in this country his most memorable contribution was the part he took in the Mars group exhibition at the Burlington Galleries in 1938.

Then he went to America, because his vocation was teaching and England offered no chance in this direction to Moholy, any more than to Gropius. It was Gropius who suggested Moholy as the head of the 'New Bauhaus' in Chicago. Nearly a third of the book is concerned with the superhuman struggle to keep going the new school and, later, the Institute of Design in Chicago. It was a time of teaching, inspiring and continuous fighting with the 'generous sponsors' when, in spite of academic success, the school was not showing the expected financial reward.

The main interest of the book, which is well illustrated, is the intimate behind-the-scenes story of a man fanatically devoted to his vocation, against the background of the political convulsions of Central Europe and the financial jungle of North America.

ERNÖ GOLDFINGER [*L*]

Shopping Centers: Design and Operation, by *Geoffrey Baker* and *Bruno Funaro*. (Progressive Architecture Library.) 11¼ in. × 9 in. 288 pp. incl. pls. and pp. of illus. New York: Reinhold. [1951.] $12.00.

One of the most interesting manifestations of the automobile age in the U.S.A. is the rapid growth of the out-of-town shopping centre. Starting merely as a suburban concentration such as we have in this country, it has grown, through the universal use of the car and the increasing congestion of the central city streets, to a far more positive development. Today there are many examples of neighbourhood and community shopping centres, both large and small, carefully planned with a selected range of shops and with the ample car parking which is their greatest asset.

So serious has the parking situation become that many of the big department stores have themselves set up branches in the suburbs or in outlying communities where space for parking can be provided. In the latter case there has been a natural tendency for other shops to grow up around the main centre of attraction.

The latest development, which is still so new that it is covered in this book only by models and sketches, is the regional shopping centre, often not related in any way to any existing suburban or rural community but sited 10 to 20 miles out from a large city on important motor traffic routes. The first of these, the Middlesex Centre at Framingham, some 15 miles from Boston, is now open and is apparently proving very successful. It sets the pattern as a pedestrian mall with two department stores, a supermarket, theatre and some 40 different shops around. The whole group is surrounded by car parking areas, which are easily approached from the adjacent highways.

Shopping Centers: Design and Operation sets out to cover the entire field, and after describing the trend goes on to market analysis, site selection, site planning, car parking, freight and service arrangements and store buildings, finishing by illustrating 63 examples of shopping centres from all parts of the States.

The centres illustrated are provided with block plans showing the disposition of the individual shops, which are also clearly listed, type dimensions and areas being given. It is noticeable that the idea, once so prevalent here, of limiting the shops in any centre to one of each type, is deliberately avoided and a healthy competition is obviously considered to be an essential element of attraction, even where, as in the regional centre, a department store may itself be a main sponsor of the scheme.

Many of the photographs are aerial and give a bird's-eye view of the layouts, which emphasises a problem which receives little or no attention. The serried lines of parked cars which surround all these developments must from ground level tend to swamp the generally undistinguished buildings and render the street display windows comparatively ineffective. While it must be remembered that many parked vehicles are an indication of thriving business and, therefore, a source of attraction, there is obviously a big field here for studied tree planting to enhance the buildings, break up the monotonous appearance of the rows of vehicles and shield the cars themselves from the sun.

Car parking being of paramount importance in the development of the shopping centres, it is only to be expected that it should receive special attention. This aspect of the problem has, in fact, been very well tackled and a full analysis and dimensions are given for every method of parking.

The detailed suggestions for site selection are only applicable to a certain degree in this country, but the real criticism of the book is that in endeavouring to cover the subject in its entirety, the authors have adopted an unselective approach which is statistical rather than architectural. Much of the information is of value to planners, but appears to have been written mainly for promoters. Its occasional descent to detail appears out of place, and is too sketchy to be of much value.

The layout is disappointing for a book presumably intended for architects; the typography abounds in heavy type paragraph initials and black bordered lists; most of the diagrams, though clear, are not well drawn and the photographs, seldom of a high standard or well placed, have too much contrast to register detail.

ROLF HELLBERG [*F*]

Middlesex, by *Nikolaus Pevsner*. (The Buildings of England *series*.) 7¼ in. 204 pp. incl. map + 64 pls. text illus. Harmondsworth: Penguin Books. 1951. 3*s*. 6*d*.

Here is the third title in this fine series. It seems to be every bit as good as the first two, and one can only marvel at Dr. Pevsner's comprehensive erudition and the speed at which he and his collaborators work. Many Londoners, one imagines, will be surprised to find that so much that they regard as their particular property lies outside the borders of London County.

Modern Fluorescent Lighting, *etc*., by *A. D. S. Atkinson*. 8½ in. 159 pp. text illus. Newnes. 1951. 15*s*.

The technical editor of the Lighting Service Bureau has covered in considerable detail the latest developments in this method of illumination—latest, that is to say, when the book was compiled. Advances in fluorescent lighting technique have been so rapid that any book on the subject becomes quickly out of date.

Register of Surveyors, Land Agents, Auctioneers and Estate Agents. 1951. *Royal Institution of Chartered Surveyors and others*. 9½ in. T. Skinner. [1951.] £2.

This publication provides in a single volume authoritative and essential information (including full lists of members) about the Royal Institution of Chartered Surveyors, the Land Agents' Society, the Chartered Auctioneers and Estate Agents' Institute and the Incorporated Society of Auctioneers and Landed Property Agents.

A Guide to Designing Windows, by *Neville Woodbury*. 7¼ in. [75] (77-2) pp. text illus. Neville Woodbury Ltd. 1950. 6*s*.

A very short book, in which the architect-author lays down with enviable confidence the principles of successful window design, and illustrates his points with sketches.

J.C.P.

New Towns. Their challenge and opportunity, by *L. E. White*. (National Council of Social Service.) 8½ in. 100 pp. + (8) pls. 1951. 4*s*. 6*d*.

A brief study of community development in the New Towns for the general reader. The author has written frequently and competently on social questions before.

Correspondence

'GALLOPING JOISTS'

Sir,—During the construction of two structures in Annapolis, Maryland, built between 1750 and 1780, the specifications and list of materials included 'galloping joists' and 'galloping rafters'. I have searched through various carpenters' and builders' guides, dictionaries of terms, etc., from 1800 and have found no mention of these terms. Perhaps some of your members may be familiar with the uses of 'galloping joists and rafters'.

Yours sincerely,

E. J. GAMBARO, A.I.A.,

New York City.

Notes from the Minutes of the Council

MEETING HELD 6 MAY 1952

Loyal Address to H.M. The Queen. The letter of acknowledgment received by the President from Sir David Maxwell Fyfe was published in the May issue of the JOURNAL.

Appointments

(A) Professional Classes Aid Council: R.I.B.A. Representative: Mr. J. Alan Slater [*F*], re-appointed.

(B) General Council for the National Registration of Plumbers: R.I.B.A. Representative at Annual General Meeting: Mr. Martin S. Briggs, Honorary Secretary, R.I.B.A.

(C) R.I.B.A. Representatives on B.S.I. Committees: HIB/–, Hardware and Ironmongery Industry Standards Committee, Mr. O. C. F. Carey [*A*], Mr. F. R. Pite [*A*]. PVC/–, Paints, Pigments and Varnishes Industry Standards Committee, Mr. D. L. Medd [*A*]. STB/6, Exfoliated Vermiculite Aggregate, Mr. D. W. Aldred [*F*].

Direct Election to the Fellowship. The Council gave approval to a recommendation of the Royal Australian Institute of Architects that the following Past Presidents of the Tasmanian Chapter, R.A.I.A., be elected to the Fellowship under the provisions of the Supplemental Charter of 1925, Section IV, Clause 4: Raymond Nairn Butler, Albert Lauriston Crisp, Colin Ernest Philp, Bernard Ridley Walker.

Mr. Basil Spence, O.B.E., A.R.S.A. [*F*]: The Council's congratulations have been conveyed to Mr. Spence on his election as an Associate of the Royal Scottish Academy.

Devon and Cornwall Architectural Society: Alteration to Rules: The Council gave formal approval to an amendment to the Rules of the Devon and Cornwall Architectural Society.

Sanitary Inspectors' Working Party: The Council accepted an invitation from the Ministry of Health to submit a memorandum of evidence to the Sanitary Inspectors' Working Party, dealing with the composition of the Sanitary Inspectors' Examination Joint Board, training in building subjects and qualifications for entry, and appointed Mr. T. E. Scott [*F*] to act as the Institute's representative in giving evidence in consultation with Mr. L. A. Chackett [*F*], the Institute's representative on the Examination Joint Board.

Ministry of Housing and Local Government Circular No. 28/52: On the recommendation of the Town and Country Planning and Housing Committee, it was agreed to ask the Minister of Housing and Local Government to receive representatives of the Institute to discuss aspects of the Ministry's Circular No. 28/52.

Report of the Gardiner Committee: On the recommendation of the Salaried and Official Architects' Committee, it was agreed to express to the Treasury the Institute's disappointment that the recommendations originally put forward by the Institute in regard to the salaries of chief architects in central government service had not been endorsed by the Gardiner Committee, and to ask that the Treasury would again consider these recommendations.

Gift from Mrs. Margaret Chadwell, U.S.A.: The Council received with appreciation a gift of $100 from Mrs. Margaret Chadwell, to be presented to an architectural student considered to be of outstanding talent, and it was agreed to convey the thanks of the Council to the donor.

Membership: The following members were elected: as Fellows, 6; as Associates, 93.

Students: 77 Probationers were elected as Students.

Applications for Election: Applications for election were approved as follows: *Election 17 June 1952:* as Honorary Corresponding Members, 4; as Fellows, 13; as Associates, 102. *Election 7 October 1952 (Overseas Candidates):* as Fellow, 1; as Associates, 25.

Applications for Reinstatement: The following applications were approved: *As Associate*, George Henry Hobkinson; *as Licentiate*, John Francis Anthony Cavanagh.

Obituary: The Secretary reported with regret the death of the following members: The Right Hon. Lord Greene, O.B.E., M.C., Hon. D.C.L., Hon. LL.D. [*Hon. F*], Arthur Edgar Beresford [*F*], Alfred Burr [*F*], Frederick Charles Cowderoy-Dale [*F*], John Wilford Hilbert Farrow [*F*], Albert Lancelot Lang [*F*], George Edric Neel [*F*], Frederick Robert Streeter [*F*], Adam Knowles Stewart [*A*], Stanley Balmer [*Retd. A*], Herbert Story [*Retd. A*], Henry Ernest Flinn [*L*], Edward Harold Forster [*L*], John Glendinning [*L*], James Keighley [*L*], Henry Hewitt Bridgman [*Retd. L*], Henry Troughton Candler [*Retd. L*], William Roderick MacDonald [*Retd. L*], Joseph Brendon Sherlock [*Student*].

By resolution of the Council the sympathy and condolences of the Royal Institute have been conveyed to their relatives.

Obituaries

Raymond Frank Neave [*A*] died on 6 October last at the early age of 36.

Mr. Neave, who received his architectural training at the Polytechnic, Regent Street, London, started in personal practice in 1947. His principal work was Lloyds Bank premises at 6-8 Eastcheap.

Ernest George Besant [*Retd. A*]. News has been received of the death of Mr. Besant on 4 February 1949, at the age of 73. Mr. Besant was the grandson of Professor R. Willis, of Cambridge, author of *The Architectural History of the University of Cambridge*, *The Architectural History of Canterbury Cathedral*, and many other works. Mr. Besant was articled to Mr. Fawcet of Cambridge, and built several houses in the neighbourhood of that town and of London. At the time of his death he was working on a design for perpetual motion.

Horace James Ash [*Retd. A*], Ashpitel Prizeman in 1908, died on 8 September 1951.

After working in various private and local government offices, Mr. Ash set up in private practice in Nuneaton in 1909. His work there included the art gallery and museum, the County Mining School and two senior modern schools, in addition to housing schemes, private houses, ecclesiastical work and commercial buildings of a varied nature.

Mr. Raymond J. Ash [*A*] writes of him: 'Mr. Ash's domestic work, stemming from the work of such early pioneers as Voysey, had a simplicity and charm all its own. The educational buildings which he carried out between 1928 and 1940 pioneered the "open-air" system and sub-floor heating. Mr. Ash was a modest and retiring man by nature, much respected by his clients and friends. His private interests included a fine collection of first editions and etchings, and sketching in the Cotswold villages, which he loved so well.'

Arthur John Knott [*F*], Hon. Secretary of the Bristol Society of Architects, 1938-48, died on 23 November 1951, aged 63.

Mr. Knott was articled to Messrs. Hans Price and William Jane, Weston-super-Mare, from 1907 to 1910. He followed this with a period as assistant in that firm, then went to South Africa and worked with several Cape Town firms. He joined the Army in 1914, and in 1919 came home to Bristol as an assistant to Sir George Oatley. In 1926 he entered into private practice on his own account, though he continued to help Sir George Oatley with the buildings for Bristol University and St. Monica's Home.

Mr. Knott's principal architectural works were: the reconstruction of the Guildhall, Bristol; a number of factories and warehouses in Bristol; a number of churches, including Cotham Methodist Church, City Road Baptist Church, the Jewish Christian Church, St. Katharine's, Bristol 6, the United Methodist Church, Mount Zion Methodist Church and St. Saviour's Church, Bristol 6; a number of private houses, including 'Pyper's', Rudgeway, Gloucestershire, for Sir Stanley White; a house at Stoke Bishop for Mr. Cyril Parsons; a house and chauffeur's lodge for Mrs. Lister, Cam, near Dursley; a house for Mr. J. V. Parker at Brockley, near Bristol; numerous pre-war houses up to £3,000; a hotel for Messrs. Crocker Brothers Limited, Cotham Road, Bristol, and alterations and additions to the Abbey Hotel, Malvern; some modern service flats in Bournemouth, and two estates at Downend, Bristol.

Peter Robert McLaren [*L*] died on 3 December 1951 at the age of 89.

Mr. McLaren was apprenticed to an Edinburgh firm from 1876 to 1881, remaining as assistant until 1885, when he left to set up his own practice, which he carried on until his death.

Mr. McLaren was responsible for the erection of a number of flats and houses in Edinburgh, besides numerous shops, both in Princes Street and elsewhere, for the Patrick Thomson store, Northbridge, the Craigentinny estate, Portobello, and miners' welfare homes near Glasgow.

Charles Frederick Deffee [*Retd. L*] died 15 October 1951, aged 65.

After serving his articles, Mr. Deffee entered into personal practice in 1934, and practised in London, first in St. James' Street, then in Old Queen Street. His work was mostly domestic, and he was concerned in a number of housing schemes. During the war he carried out quantity surveying for the Ministry of Works.

John Edward Burke [*A*] died on 25 September 1951 at the age of 66, in Dublin, where he lived.

Mr. Burke was a member of Dublin Corporation's Housing Committee.

Freeman Housley [*Retd. L*] died on 6 October 1951, aged 77.

Mr. Housley was articled to Mr. Wills, of Derby, in 1889, and in 1895 became his assistant. In 1901 he went into the Architect's Office of the Midland Railway, later returning for a period to Mr. Wills. In 1916 he went to the Birmingham Corporation, and remained

there until his retirement in 1939, with the exception of two years, 1917-1919, during which he served in the Royal Air Force in the first world war. By the time he retired Mr. Housley had reached the position of Chief Architectural Assistant with the Birmingham Corporation. Although retired, he carried out bomb damage surveys for the Corporation during 1941 and 1942. His chief works consisted of houses at Stretham, Ely, and at Derby and Smethwick, and the planning of an estate at Harborne, Birmingham.

Mr. Housley taught building construction at Matlock and Derby.

David Adrian Ferris Smuts [*A*]. Mr. Smuts unhappily died on 4 June 1951, at the early age of 32.

Mr. Smuts studied at the Cambridge University School of Architecture, and at Witwatersrand University. He started in personal practice in June 1950 in Johannesburg.

Andrew Rollo [*A*] died on 29 November 1951 at the age of 74. Mr. Rollo was Institute Medallist (Drawings) 1903, and for many years chief draughtsman in the City Architect's Department, Edinburgh.

Mr. Rollo studied at the Glasgow School of Art, and subsequently worked in Glasgow with Messrs. Stark and Rowntree from 1895 to 1900, in London with Mr. Frederick Rowntree from 1900 to 1907 and in Toronto from 1907 to 1915 with Messrs. Darling and Pearson. From 1915 to 1918 he served with the Royal Engineers, and then went to Midland Garden Cities Development Limited in Birmingham, where he stayed until he entered the City Architect's Department in Edinburgh. He was there from 1928 until his retirement in 1946.

Mr. Rollo's chief architectural works comprised a boys' and a girls' school for the Society of Friends in York, a school of domestic science in Toronto, various state-aided housing schemes while with Midland Garden Cities Development Limited in Birmingham, and, of course, much work in connection with Edinburgh's slum clearance and reconstruction schemes carried out before World War II.

Subsequent to his retirement Mr. Rollo assisted with the preparation of the 'Inventory of the Ancient and Historical Monuments of the City of Edinburgh', published 1951, and also collaborated with the late Mr. E. J. MacRae [*F*], then City Architect, on the reports 'The Heritage of Greater Edinburgh' and 'The Royal Mile', for which he prepared the plans.

Richard James Vernon [*L*] died on 5 December 1951, aged 68.

Mr. Vernon served his articles with Messrs. Bradshaw Gass and Hope, Bolton. He was in the Architects' Department of the Co-operative Wholesale Society in Manchester from about 1910-48, and in private practice at Bramhall from 1948 until his death. From 1949-51 he carried out work for the Duchy of Lancaster on the Crewe Estate.

Sidney Norman Overton [*L*] died on 4 December 1951, aged 43.

Mr. Overton was in practice for a short time in Bournemouth, and also with Messrs. Giles, Thake and Gilbert, Jermyn Street, London. For several years during the war he was attached to the L.C.C., resigning in 1944 to take up an appointment with the Bournemouth Corporation, but owing to ill-health he had to resign in September 1944. Since that date he was not fully engaged in practice, but only carried out a small amount of survey work for personal acquaintances.

William Petch [*Retd. F*] died on 16 April 1952 in his 85th year. Mr. E. A. Fermaud [*F*], an old friend and former partner, has sent us the following appreciation:

'William Petch was a Yorkshireman, born in Scarborough, and came of a family of whom many were architects. He came to London many years ago and engaged in general practice, the greater part of which was related to licensed premises, in which he carried out many alterations and rebuildings. In 1927 he took an active part in the preparation of a scheme for the New Bradford Grammar School, which was placed first in the competition. He was able to attend the opening in January 1949.

'He was a lovable man to work with and for. His quiet, gentle yet able manner endeared him to many.

'During the early days of his practice in London he had an office in the City, but before the first World War acquired premises at No. 8 Buckingham Palace Road, which he retained until his retirement.'

Harry Richard Gardner, A.M.T.P.I. [*F*], died on 23 December 1951, at the age of 84.

Mr. Gardner received his early architectural training with Mr. Ward of Hastings, and later with a London firm. While at Hastings he entered the Bexhill Town Hall Competition, and won it in the name of the firm. Later in his career he was among the final competitors in the L.C.C. County Hall Competition and won the Sutton Hospital Competition, but this was not carried out owing to the first world war.

Mr. Gardner began private practice in Leatherhead, where he was responsible for a number of houses and small estate layouts, as well as some licensed houses for the Wenlock Brewery Co. In association with the late Mr. P. H. Adams he altered and refitted many of Messrs. J. Sainsbury's branch shops, and together with Mr. C. H. Rose he built the municipal offices of the Leatherhead Urban District Council.

In 1928 he entered into partnership with Mr. H. Chas. Pettett, F.R.I.C.S., [*L*], and they were engaged on many licensed houses and hotels, private housing, shops, offices and showrooms, blocks of flats, St. Joseph's R.C. Church and Ebbisham Hall, Epsom, the Cuddington Isolation Hospital and the Horsham Base Hospital. He was also architect for Epsom Municipal Corporation's Hook Road Housing Scheme. He retired from active work in 1948.

Mr. Gardner was for some years auditor to the Guildford Chapter of the South Eastern Society of Architects.

Mr. H. Chas. Pettett [*L*] writes:

'Mr. Gardner was a born architect with a tremendous enthusiasm, and will be remembered as an outstanding figure for his championship of the integrity and dignity of the profession, which he practised with outstanding ability. He was a competition enthusiast and a lover of the Georgian period, and in south-east Surrey his works will continue as a reminder of a gracious and pervasive influence.'

Archibald Stuart Soutar, M.T.P.I. [*L*], died on 26 December 1951, aged 72. Mr. Soutar was awarded the R.I.B.A. Distinction in Town Planning. He was a past member of the Art Standing Committee.

Mr. Soutar received his architectural training at Dundee University and was subsequently articled to Mr. J. Murray Robertson. In 1901 he took up an appointment with the Architects' Department of the L.C.C., and in 1912 entered into partnership with his brother, the late Mr. J. C. S. Soutar, whose death was announced in the April 1951 issue of the JOURNAL. They were joint architects for the Ruislip Manor Ltd. and Knebworth Estates, and were associated on many large buildings, including blocks of flats, houses, offices, showrooms, workshops, garages and preparatory schools. Mr. Soutar was also engaged for some time in Church Army housing. He ceased taking an active part in the practice about ten years ago.

George Arthur Boswell [*F*], Past President of the Glasgow Institute of Architects, died on 15 February, aged 72.

During his fifty years as a practising architect, Mr. Boswell was responsible for some fine country houses, besides other housing and schools, factories and farm buildings, but his greatest speciality was cinemas, in which field he was something of a pioneer in the west of Scotland. At the time of his death Mr. Boswell, who was on the panel of architects of Scottish Industrial Estates, was engaged on plans for a new factory for the company at Greenock. He had previously carried out the architectural work on Queenslie Estate for the company.

Mr. Boswell was always very much interested in the work of the younger men in the architectural profession, and at one time served on the governing Board of the Glasgow School of Architecture.

John Wittet, C.B.E., J.P. [*Retd. F*], Past President of the Inverness Architectural Association and a former Lord Provost of Elgin, died 10 March, aged 84.

Mr. Wittet's principal architectural works included the churches at Pluscarden and Burghead, Forres Academy, Rothes School, Auldearn School, the Catholic chapel and general hospital at Forres, the parish church hall, Elgin, and the Williamson entrance at Ladyhill, Elgin. In his early days he was associated with a restoration scheme for Edinburgh Castle, in which he was responsible for the drawings for the oak carvings in a section of the building.

Mr. J. G. Marr [*F*] writes the following appreciation:

'By the death of Mr. John Wittet on 10 March the north of Scotland has lost one of its outstanding personalities.

'Born in Bridge of Earn, he received his architectural education in the Edinburgh office of Mr. Hippolyte Blane, R.S.A., and also worked for a short period in Glasgow. In 1892, while still in his early twenties, he was invited by Messrs. A. and W. Reid, the old-established architects in Elgin, to assist them. He was made a partner the following year, and thereafter carried on an extensive practice in his own name, latterly in association with his son, Mr. William Wittet. Among his many works are schools, churches and church halls, all marked by a simple straightforwardness and restraint.

'Of an amiable character, Mr. Wittet endeared himself to all with whom he came in contact, and on his retirement his never failing courtesy, tact, and fair dealing were suitably recognised by the tradesmen and town councils of Elgin and Forres.

'He took an interest in the Inverness Chapter of the Royal Incorporation of Architects in Scotland, was President of the Chapter and its representative on the Council of the Royal Incorporation, in all of which his wise counsel was appreciated. Among his other activities he found time to serve on the town council of Elgin, his service culminating in a period of six years as Lord Provost. He was an Elder of the Church of Scotland, an ardent Freemason, and a Justice of the Peace, besides fostering several local associations.

'While his passing will be mourned by his many friends, consolation will be found in the long life he attained, so full of interest and usefulness.'

Harold Edward Davies [*F*] died on 29 February 1952, aged 75.

Mr. Davies lived throughout his life in Liverpool. He was articled to his grandfather, Mr. Edwin Davies, in that city, and started in personal practice in 1901. In 1925 he took into partnership his son, Mr. Harold Hinchcliffe Davies [*A*], who now carries on the practice of Harold E. Davies and Son.

Mr. Davies will be remembered as pioneering the movement to improve the design of inns and public houses, a number of which he erected in Lancashire and Cheshire in the early 'twenties. In collaboration with his son he had latterly been engaged on the design of the new Liverpool Corn Exchange building. Also, during his 40 years' service on the Liverpool City Council—he became an Alderman in 1923—he took a great interest in the city's public baths. He was for 30 years Chairman of the City Council's Baths Committee, and during that time some of the largest and most up-to-date baths in the country were erected, incorporating perpetual filtration, foam baths and artificial sunlight. One of them—the Harold Davies Baths at Dovecot—was named after him.

Mr. Davies had been a magistrate since 1926, and also did a good deal of philanthropic work. In particular, he was for more than 25 years honorary treasurer of the Aged Poor Dinner and Relief Fund.

Stewart Kaye, F.R.I.C.S. [*A*], a past Hon. Secretary of the Edinburgh Architectural Association, died on 17 February 1952, aged 68.

Mr. Kaye was apprenticed to Mr. George Rivell, Alnwick, and, starting in personal practice in 1913, continued throughout his life in Edinburgh. He was responsible for building the offices of the EDINBURGH EVENING NEWS, Lothian House and Southhouse and Canick Knowe churches, and was consulting architect both to the Presbytery of East Lothian and the Halifax Building Society.

Notes and Notices

NOTICES

Members and Professional Affixes

The Council's attention has been called more than once to the practice, among some members, of adding a string of letters of doubtful value to the affix indicating membership of the Royal Institute on their letter paper.

This is a matter in which the Council obviously cannot dictate to members, and must trust to their good sense. It should be obvious, however, that the affix of a chartered body of high standing is weakened in effect by the addition to it of a string of other mysterious designations some of which probably indicate no more than the payment of an annual subscription.

BOARD OF ARCHITECTURAL EDUCATION

The Acceptance of Pupils and Junior Assistants and the Probationership of the R.I.B.A.

The Board of Architectural Education have noticed that the practice still persists of members accepting pupils or junior assistants without satisfying themselves that such pupils or junior assistants have reached the necessary standard of general education for the Probationership. Members are reminded that it is most important that they should not take boys or girls into their offices unless they possess one of the qualifications laid down.

A list of the recognised examinations can be obtained on application to the Secretary R.I.B.A.

R.I.B.A. Examination for the Office of Building Surveyor under Local Authorities

At the R.I.B.A. Examination for the Office of Building Surveyor under Local Authorities held on 23, 24 and 25 April 1952, thirteen candidates presented themselves, and the following were successful: Mr. Wilfred J. Morley, Mr. Wallace Platt, Mr. Ernest J. Winfield, Mr. Richard F. Stockley.

COMPETITIONS

Dow Prize Competition

The Illuminating Engineering Society offers a prize which will be awarded to the winners of a competition intended to encourage collaboration between students of illuminating engineering or of those branches of engineering concerned with illumination, and students in other fields in which applied lighting plays an important part. While entries from individuals are not excluded, the competition is primarily intended for students (under the age of 26) working in collaboration. The competition will be set and judged by a panel of Assessors appointed by the Society in co-operation with the R.I.B.A. and the Institution of Electrical Engineers.

Premium: £75 (and a certificate to each member of the winning team).

Certificates of commendation will be awarded to any other entries of outstanding merit.

Last day for submitting designs: 30 November 1952.

Relevant documents with instructions as to the form which entries should take and forms of application may be obtained from the Secretary of the Illuminating Engineering Society, 32 Victoria Street, London, S.W.1.

ALLIED SOCIETIES

Changes of Officers and Addresses

Essex, Cambridge and Hertfordshire Society of Architects, Chelmsford and District Chapter. Chairman, A. R. Dannatt [*A*].

Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects, Bedfordshire Branch. Hon. Secretary, H. J. E. Pyne [*A*], 7 Shakespeare Road, Bedford.

North Staffordshire Architectural Association. The former Hon. Secretary, W. H. Garner, has resigned, and pending a new appointment communications should be addressed to F. V. Hulme [*L*], at District Bank Chambers, Tunstall, Stoke-on-Trent, Staffs.

Institute of Architects of Malaya. President, J. M. Fraser [*A*]. Mr. Fraser's temporary address is 23 Braeside Terrace, Milltimber, Aberdeenshire. He returns to Singapore in August.

R.I.B.A. Architecture Bronze Medal Award, Essex, Cambs. and Herts Society of Architects. The R.I.B.A. Architecture Bronze Medal Award in the area of the Essex, Cambridge and Hertfordshire Society of Architects was presented on 24 May. The Award was made to Mr. C. H. Aslin, C.B.E. [*F*], County Architect of the Hertfordshire County Council, for the Templewood School, Welwyn Garden City, this having been judged the best building completed in the area during the three years 1949-51.

The presentation ceremony was held at the Templewood School and was attended by some 300 persons, including members of the Society, their guests and distinguished visitors. The school was open for inspection and there was a small exhibition showing the work of Mr. Aslin's office both in connection with the Templewood School and other projects. The ceremony was presided over by the President of the Society, Mr. H. Conolly [*F*].

Sir Hugh Casson, M.A., R.D.I. [*F*], who was R.I.B.A. representative on the jury, then addressed the gathering on behalf of the R.I.B.A., after which the President and the Immediate Past-President jointly presented the Bronze Medal and Diploma to Mr. Aslin. A replica of the Medal was then given to the Building Owners who were represented by Major R. T. Woodhouse, vice-chairman of the Hertfordshire Education Committee. Short speeches of thanks were made by Mr. Aslin and Major Woodhouse.

At the conclusion of the ceremony tea was served at the Cherry Tree Inn, Welwyn Garden City, to 280 persons, and later several parties were conducted around the Garden City.

The South Eastern Society of Architects: Annual Luncheon. The annual luncheon of the South Eastern Society of Architects was held this year on 24 May in the area of the Croydon Chapter. About 216 members and guests met for the luncheon in the Selsdon Park Hotel.

The principal guests included: Mr. A. Graham Henderson, A.R.S.A., President R.I.B.A., and Mrs. Henderson; Gen. Sir Robert H. Haining, K.C.B., D.S.O., Lord Lieutenant of Surrey; The Deputy Mayor of Croydon, Councillor H. Lock Kendell, and Mrs. Lock Kendell; The Mayors and Mayoresses of Kingston, Dartford and Gravesend; The Archdeacon of Croydon, The Venerable C. F. Tonks, M.B.E., R.D.; Mr. C. Doughty, M.P. (East Surrey) and Mrs. Doughty; Mr. R. H. Thompson, M.P. (Croydon West) and Mrs. Thompson; Sir Herbert Williams, M.P. (Croydon East) and Lady Williams; Mr. W. H. Ansell, M.C., Past President R.I.B.A.; and Mr. C. D. Spragg, C.B.E., Secretary R.I.B.A.

The toast 'The R.I.B.A. and its Allied Societies' was proposed by Mr. Cecil Burns [*F*] (President S.E.S.A.) and replied to by the President R.I.B.A. The toast 'The Guests' was proposed by Mr. L. R. Stedman [*A*] (Chairman of the Guildford Chapter S.E.S.A.) and replied to by Councillor H. Lock Kendell (Deputy Mayor of Croydon), Archdeacon C. F. Tonks, M.B.E., and Sir Herbert Williams, M.P.

Two after-luncheon visits had been arranged by the Croydon Chapter Secretary to the old palace of the Archbishops of Canterbury and to the new Croydon power station.

Wessex Federal Society of Architects: Annual General Meeting. The Annual General Meeting of the Wessex Federal Society of Architects was held on 10 May 1952 at Moor Court Hotel, Amberley Common, near Stroud, Glos.

Lieut.-Col. Eric Cole, F.R.S.A. [*F*] was re-elected President and Mr. Kenneth Nealon, A.R.I.C.S. [*A*] and Mr. F. W. Beresford Smith, A.M.T.P.I. [*A*] were re-elected Honorary Secretary and Honorary Treasurer respectively.

The Report and Balance Sheet for the year were read and approved. The President then

explained the new Constitution of the Society, under which the Constituent Societies are more independent.

After lunch, members divided into car convoys and paid visits to Nether Lypiatt Manor, Daneway House, and Owlpen House, which were opened by kind permission of the owners. These visits, which were much enjoyed, were organised by the Gloucestershire Architectural Association. Members afterwards took tea together.

GENERAL NOTES

Leeds School of Architecture
Applications are invited for the post of full-time Head of the School of Architecture and Town Planning at Leeds. The salary is £1,300 by £50 increments to £1,450. The Head of the School is allowed to engage in private practice provided it does not interfere with the efficient working of the School. His duties will begin on 1 September 1952. Forms of application are obtainable from the Chief Education Officer, Education Offices, Calverley, Leeds, 1.

Hoffman Wood Scholarships
Applications are invited from students of architecture of either sex born in Yorkshire of at least one Yorkshire parent for scholarships given by the will of William Hoffman Wood, deceased, to defray the costs of architectural training and study at home and abroad. Applicants must be under 21 and should forward particulars of age, place of birth of self and parents, education and present occupation to W. H. Clarke and Company, Solicitors, 12 South Parade, Leeds 1, by 31 July 1952.

Leverhulme Scholarship
The Principal of the Cheltenham College of Art has drawn our attention to the fact that the winner of this year's Leverhulme Scholarship, Mr. Stuart R. Lewis, is a student of the College. All the drawings and designs which he submitted for the Scholarship were done at the College and in the local office where he works. This is the third time in four years that a student from this College has won this Scholarship.

R.I.B.A. Golfing Society
The annual match with the Building Alliance Golfing Society had to be replayed owing to the state of the weather on 1 April, and the fixture took place on 29 April at Camberley Heath, where the players were very hospitably received.

The morning singles resulted in a tie of 9½ matches each, but in the foursomes in the afternoon the Building Alliance succeeded in winning the odd match and, therefore, won the day.

Members' Column

This column is reserved for notices of changes of address, partnership and partnerships vacant or wanted, practices for sale or wanted, office accommodation, and personal notices other than of posts wanted as salaried assistants, for which the Institute's Employment Register is maintained.

APPOINTMENTS

Mr. D. E. Percival, A.M.T.P.I. [*A*] has resigned his appointment as Assistant Planning Officer, Welsh Office, Ministry of Housing and Local Government, and is now Assistant Chief Architect to East Kilbride Development Corporation, Torrance House, East Kilbride.

Mr. E. A. Wingrave [*A*] has been appointed Staff Architect to Messrs. Groves and Whitnall, Salford and Manchester, on the retirement of Mr. James D. Smith [*L*].

PRACTICES AND PARTNERSHIPS

Mr. Peter L. Cleveland [*A*] is now in practice at 1 Hanover Square, London, W.1 (MAYfair 1101) and will be pleased to receive trade catalogues, etc.

Mr. Eric H. Firmin [*F*] has taken into partnership Mr. J. T. F. McCusker [*A*] and Mr. K. Bridger. The practice will continue at 10 Manchester Square, W.1, under the style of **Eric Firmin and Partners.**

Colin Gray, Dip.Arch. [*A*] has entered into partnership with **Peter Bartlett,** Dip.Arch. [*A*] and **Gordon Graham,** Dip.Arch. [*A*]. The practice will now be styled **Bartlett, Graham and Gray,** of Castle Gate Chambers, Castle Gate, Nottingham. (Nottingham 42772).

The partnership of **Messrs. Johnson and Crabtree** (Mr. H. A. Johnson [*F*], Mr. William Crabtree [*F*], Mr. L. Bulmer [*L*] and Mr. A. H. Wilson [*A*]) has been dissolved. Mr. Johnson, Mr. Bulmer and Mr. Wilson will continue to practise in partnership at 20 Priory Place, Doncaster under the style of **T. H. Johnson and Son. Mr. William Crabtree** will practise under his own name at 8 Robert Adam Street, London, W.1.

Mr. Colin Laird, Dip.Arch. [*A*] is opening a practice in Trinidad, British West Indies, where he will be pleased to receive trade catalogues and samples. His address will be c/o Pereira, 40 Ellerslie Park, Port-of-Spain, Trinidad, B.W.I.

Messrs. Pratt and Gray (Mr. H. Cullerne Pratt, A.M.T.P.I. [*A*] and Mr. Ronald P. Gray, M.B.E., A.M.T.P.I. [*A*]) have opened an office at 18 Church Street, Whitehaven (Whitehaven 41).

Messrs. H. G. Radford and Partners (Mr. Hedley G. Radford [*A*] and Mr. Russell A. Howells [*A*]) are now practising under the style of **Radford, Howells and Partners** at 1A Iganga Road, Jinja, Uganda. The practice will remain closely associated with Messrs. H. G. Radford and Partners of Kampala and Nairobi.

CHANGES OF ADDRESS

Mr. William Gill, A.M.T.P.I. [*A*] has removed to 63 Cromwell Road, South Kensington, S.W.7 (VICtoria 3822).

Mr. Norman K. Jarvis [*A*] has now changed his address to P.O. Box 137, Lusaka, Northern Rhodesia, and he will be glad to receive trade catalogues, etc.

The new address of **Mr. M. F. H. Roe** [*A*] is c/o The School of Architecture, Tulane University of Louisiana, New Orleans 18, Louisiana, U.S.A.

The address of **Mr. B. G. White** [*A*] is now Public Works Department, Accra, Gold Coast, W. Africa.

PRACTICES AND PARTNERSHIPS WANTED AND AVAILABLE

Fellow requires partnership or post leading thereto, anywhere in the British Commonwealth. Qualified and highly experienced in planning, in addition to first-class architectural experience. Would consider post as commercial company's architect. Box 21, c/o Secretary, R.I.B.A.

Fellow (45), at present Deputy Architect to commercial company, seeks a partnership or senior position leading thereto. Some capital available. South of England preferred. Box 41, c/o Secretary, R.I.B.A.

Partner required in Associate's well-established provincial practice in West-country city. Mainly industrial, agricultural and housing work. Box 44, c/o Secretary, R.I.B.A.

For Sale. Busy old established West Country city practice. Churches, private housing, shops and estate work. Box 45, c/o Secretary, R.I.B.A.

Rural practice in South Devon market town for sale. Centrally situated offices completely furnished. Box 46, c/o Secretary, R.I.B.A.

Member [*F*], London practice, 20 years, going abroad, desires to sell to fellow member all plans, furniture and office contents, together with one commission approx. value £30,000 awaiting building licence. Payments can be arranged by instalments. Partnership considered. Box 49, c/o Secretary, R.I.B.A.

FOR SALE

For sale. R.I.B.A. Journal, Vols. 45 and 46 (1938, 1939); buckram bound; good condition. Box 42, c/o Secretary, R.I.B.A.

For Sale. Three daylight printing frames. Double Elephant, Imperial and ½ Imperial. Price £15. Box 47, c/o Secretary, R.I.B.A.

For Sale. One double elephant drawing board, price £4 4*s*. One 10 in. adjustable set square (Thorntons), price 15*s*. (Telephone: VIGilant 5684.)

ACCOMMODATION

Member has small room to let in his office near Bond Street. Area about 100 sq. ft. Rental £6 per month, including heat, light and share of telephone. Box 43, c/o Secretary, R.I.B.A.

Member with offices near Sloane Square has accommodation available at moderate cost. Would suit individual architect. Box 48, c/o Secretary, R.I.B.A.

The Architects' Special Motor Car Insurance at Lloyds

The Architects' Benevolent Society's Insurance Committee in conjunction with a firm of Lloyd's Insurance Brokers have devised a Special Motor Car Policy for Architects. This policy and the special advantages to be gained from it are available only to members of the Royal Institute of British Architects and its Allied and Associated Societies.

SPECIAL FEATURES INCLUDE:

Discount of 17½ per cent.

Agreed Values.

Extended Personal Accident Benefits.

Enquiries for this special Scheme to:

The Secretary, A.B.S. Insurance Department, 66, Portland Place, London, W.1. (LANgham 5721)